



XXXII.  
1920.

WEST RIDING OF YORKSHIRE COUNTY COUNCIL.

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THIRTY-SECOND

ANNUAL REPORT


OF THE

County Medical Officer,

1920.

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Table IV. .. ..	No. of Visits by Health Visitors.

## PREFACE.

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AREA of Administrative County	..	..1,652,647 acres.
POPULATION for purposes of Birth Rate	..	1,499,162 ,,
POPULATION for purposes of Death Rate	..	1,498,453 ,,
SANITARY DISTRICTS, 151, namely :— 11 Boroughs.		
		112 Urban Districts.
		28 Rural Districts.

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The Vital Statistics for the years 1919 and 1920, and for the past ten years, may be summarised as follows :—

		<i>Average for 10 years. 1910-1919.</i>	1919.	1920.
BIRTH RATE (Administrative County)	..	22·8	19·0	25·2
Per 1,000 estimated population.				
DEATH RATE	.. .. .	14·4	14·2	12·6
Zymotic Death Rate	.. .. .	1·23	0·57	0·95
Phthisis Death Rate	.. .. .	0·83	0·82	0·71
Respiratory Death Rate	.. .. .	2·57	2·84	2·27
Per 1,000 estimated civil population.				
INFANTILE MORTALITY <i>i.e.</i> , Number of deaths under	112	100	92	
one year per 1,000 Births.				

JAMES ROBT. KAYE,

*County Medical Officer.*

Wakefield,

December, 1921.



## PART I.

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**Area.**—During 1920, the only change affecting the area of the Administrative County was the transfer of the Parish of Middleton (Hunslet Rural District) to Leeds County Borough which took effect as from the 1st April, 1920.

The number of Sanitary Districts in the County, namely 151, remained as in 1919.

**Population.**—The population employed for the purpose of the vital statistics contained in this report is an estimate composed partly of figures furnished by the Registrar General, and in a number of instances, of the enumerations given in the preliminary report of the Census for 1921. This latter report was issued in August, 1921, and, as was to be anticipated after the disturbed conditions of recent years, a comparison between actual and estimated figures showed a considerable divergence in a number of instances. The rates had, however, been calculated for each Sanitary District on the earlier estimates, and were in type; the method was therefore adopted of making a recalculation for those Districts only in which the general Death Rate was affected to the extent of over 0·5 per 1,000. The resultant totals of population can therefore be regarded as reasonable estimates for the year 1920.

**Births.**—The total of 37,853 births (males 19,383 females 18,470) registered during 1920 gives a rate equal to 25·2 per 1,000 of the estimated population against 19·0 for the previous year. In the Urban Districts the birth rate was 24·4 per 1,000, and in the Rural Districts 27·6. The provisional rate for England and Wales for 1920 was 25·4 per 1,000—the highest since 1909.

The birth rate for the County for 1920 was the highest since 1910; it exceeds the rate for 1919 by 6·2 per 1,000, and the number of births registered was 9,439 in excess of the 1919 total. The number of births was approximately twice that of the deaths, the registered figures being, births 37,853, deaths 18,933.

Considerable optimism would be required to expect that this return to a more fecund condition is more than transient, and the opinion may be hazarded that, owing to the peculiar and abnormal social conditions prevailing, the year 1920 will stand alone in this respect.

Illegitimate births in the County numbered 1,837, equal to a rate of 1·23 per 1,000 of the population compared with 1·06 for 1919, and 1·00 for 1918.

Worked out in Table I., at the end of the report, are the birth rates for each District in the County, and it is interesting to note that no fewer than 21 Urban, and 7 Rural Districts contributed birth rates varying from 30·0 to as high as 37·0 per 1,000.

**Deaths.**—An exceedingly low death rate is recorded for 1920, the 18,933 nett deaths yielding a rate for the County of 12·6 per 1,000 of the population against 14·2 for 1919. The rate for the Urban Districts was 12·9 per 1,000 and the Rural Districts only 11·9. The rate for England and Wales was 12·4 per 1,000, to which figure the County rate approximates closely. The West Riding rate, and the death rate for the country generally, are lower than in any other year on record. This is encouraging when one remembers that a high birth rate is usually associated with a correspondingly high death rate. Turning to the individual Sanitary Areas in Table I. of the appendix it will be noted under column 7 that excessively low death rates are recorded for many districts. In a few instances, however, the rate was over 16·0 per 1,000, though most of these are small districts where the addition of a few deaths to the average number increases the death rate very appreciably.

Under the Registrar General's system of allocating deaths to the district of usual residence, 2,396 deaths were transferred to the districts to which they properly belonged.

**Infantile Mortality.**—The year 1920, which had the highest birth rate since 1910, had the lowest infant death rate on record, both for the County and for England and Wales. In the County Area 3,472 deaths were registered of infants under one year of age, and this number corresponds to a rate of 92 per 1,000 births, compared with an average of 112 for the previous ten years, and 80 for England and Wales during 1920. It has been previously noted that a high birth rate is usually accompanied by a relatively high death rate, particularly amongst infants. It is therefore encouraging to record a low rate for 1920, and the efforts of the Child Welfare Section of the Department would appear to have had satisfactory results. The work of this Section is dealt with in some detail at page 24 of this report.

**Illegitimate Births and Infant Mortality.**—An interesting comparison is made in the following Table which exhibits the mortality rates amongst legitimate and illegitimate infants, and deals with 1920, and the previous year.

District and Year.	Legitimate Infants.			Illegitimate Infants.		
	No. of Births.	No. of deaths under one year.	Mortality rate per 1,000 births.	No. of Births.	No. of deaths under one year.	Mortality rate per 1,000 births.
Urban } 1919	18826	1809	96·1	1138	190	167·0
Urban } 1920	25653	2306	89·9	1277	190	148·8
Rural } 1919	7997	776	97·0	453	67	147·9
Rural } 1920	10363	910	87·8	560	66	117·9
Admin. } 1919	26823	2585	96·36	1591	257	161·5
County } 1920	36016	3216	89·3	1837	256	139·4



**Mortality at Different Ages.**—The following table gives the mortality from various causes in different age-groups in the West Riding County Area during 1920, the figures having been compiled from a return furnished by the Registrar General :—

CAUSE OF DEATH.	Age at Death.								All Ages
	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
Enteric Fever .. ..	—	—	—	4	12	19	11	1	47
Small-Pox .. ..	—	—	—	—	—	—	—	—	—
Measles .. ..	94	193	163	60	—	1	1	—	512
Scarlet Fever .. ..	2	1	11	25	6	2	1	—	48
Whooping Cough .. ..	62	27	16	3	—	—	—	—	108
Diphtheria and Croup ..	4	12	82	84	6	2	1	—	191
Influenza .. ..	43	16	21	43	37	134	105	89	488
Erysipelas .. ..	5	—	1	2	—	3	9	13	33
Phthisis (Pulmonary Tuberculosis)	6	15	16	57	217	450	266	41	1068
Tuberculous Meningitis ..	43	13	21	56	12	11	1	—	157
Other Tuberculous Diseases	36	23	24	47	41	49	39	13	272
Cancer, Malignant Disease ..	1	2	—	4	8	168	781	643	1607
Rheumatic Fever .. ..	—	1	1	45	25	30	14	5	121
Meningitis .. ..	40	15	18	24	12	9	10	2	130
Organic Heart Disease .. ..	—	—	1	44	48	211	672	940	1916
Bronchitis .. ..	374	60	23	13	10	53	265	816	1614
Pneumonia (all forms) ..	418	195	124	84	51	197	246	217	1532
Other Respiratory Diseases	16	13	22	17	5	31	89	62	255
Diarrhœa, &c. .. ..	451	64	24	15	8	30	29	34	655
Appendicitis and Typhlitis ..	—	1	4	25	25	26	24	5	110
Cirrhosis of Liver .. ..	—	—	—	2	—	4	36	11	53
Alcoholism .. ..	—	—	—	—	—	2	1	—	3
Nephritis and Bright's Disease	2	4	7	28	20	92	239	177	569
Puerperal Fever .. ..	—	—	—	—	21	60	—	—	81
Parturition, apart from Puerperal Fever ..	—	—	—	—	15	100	3	—	118
Congenital Debility, &c. ..	1198	6	3	3	1	1	—	—	1212
Violence, excluding Suicide	31	18	54	61	70	128	124	70	556
Suicide .. ..	—	—	—	—	11	50	55	20	136
Other Defined Diseases ..	645	53	51	116	125	365	1169	2762	5286
Diseases ill-defined or unknown .. ..	1	5	—	1	2	6	25	15	55
ALL CAUSES ..	3472	737	687	863	788	2234	4216	5936	18933

## Age-distribution of the Nett Deaths.

	Under 1 year.	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Total (Nett Deaths)
Urban Districts (123) ..	2496	519	481	631	609	1708	3317	4463	14224
Rural Districts (28) ..	976	218	206	232	179	526	899	1473	4709
West Riding Administrative County	3472	737	687	863	788	2234	4216	5936	18933

## West Riding Birth and Death Rates for Ten Years.

The following table shows the County birth and death rates for the past 10 years :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Birth-rate .. ..	25·1	24·4	24·6	24·3	22·8	21·2	19·6	18·6	19·0	25·2
Death-rate .. ..	15·5	13·3	14·0	13·9	15·0	14·0	14·4	18·5	14·2	12·6
Infant Mortality† ..	143	95	120	114	112	96	99	112	100	92
Zymotic Death-rate* ..	2·49	1·01	1·39	1·51	1·63	0·92	0·95	1·61	0·57	0·95
Small-Pox .. ..	nil	nil	nil	nil	nil	nil	nil	nil	nil	nil
Scarlet Fever .. ..	0·06	0·08	0·07	0·06	0·06	0·04	0·00	0·02	0·02	0·03
Diphtheria & Croup ,,	0·13	0·11	0·13	0·19	0·18	0·16	0·14	0·14	0·13	0·13
Enteric Fever .. ..	0·15	0·06	0·05	0·09	0·07	0·05	0·06	0·06	0·03	0·03
Measles ,, ..	0·50	0·34	0·28	0·32	0·53	0·13	0·31	0·71	0·12	0·34
Whooping Cough,,	0·27	0·18	0·12	0·25	0·22	0·11	0·13	0·38	0·07	0·07
Diarrhœa, &c.‡ ,,	46·19	8·08	26·38	21·68	18·64	14·07	10·42	12·58	10·45	13·6
Respiratory ,, ..	2·46	2·28	2·47	2·32	2·88	2·25	2·77	3·39	2·84	2·27
Phthisis ,, ..	0·86	0·76	0·76	0·74	0·80	0·82	0·98	1·06	0·82	0·71

† Deaths under one year per 1,000 births.

\* From 1915 includes deaths from Diarrhœa and Enteritis under 2 years of age only.

‡ Deaths under two years of age per 1,000 births.

**Urban and Rural Statistics for 1920.**—These are set out below for the aggregate districts, and a comparison is afforded with the figures for England and Wales :—

	Annual Rates per 1,000 of the Estimated Population.					Infant Mortality (Deaths under one year per 1,000 Births)
	Birth- rate.	Death- rate.	Zymotic* Death-rate.	Phthisis Death-rate.	Respiratory Death-rate.	
(1) Urban Districts (123) in the West Riding .. ..	24·4	12·9	0·9	0·8	2·3	93
(2) Rural Districts (28) in the West Riding .. ..	27·6	11·9	1·1	0·6	2·1	89
(3) West Riding Administrative County .. ..	25·2	12·6	1·0	0·7	2·3	92
(4) <i>England &amp; Wales</i>	25·4	12·4	?	?	?	80

\* Includes Deaths from Diarrhœa, etc., under 2 years of age only.



**Zymotic Disease.**—Particulars regarding the incidence of the seven principal Zymotic Diseases are given below. The combined death-rate from these diseases was 0·95 per 1,000 of the estimated population :—

Zymotic Disease.	No. of Cases 1920.	No. of Deaths 1920.	Ratio of Deaths.	
			(a) per 1000 persons attacked.	(b) per 1000 persons living.
(1) Small-Pox .. ..	—	—	—	—
(2) Scarlet Fever ..	3615	48	13·3	0·03
(3) Diphtheria and Mem- braneous Croup ..	2358	191	81·0	0·13
(4) Enteric Fever ..	175	47	268·5	0·03
(5) Measles .. ..	?	512	?	0·34
(6) Whooping Cough ..	?	108	?	0·07
(7) Diarrhœa, &c., under two years ..	?	515	?	0·34
Total of chief Zymotic Diseases .. ..	?	1421	?	0·95

**Isolation Hospitals.**—The following table gives particulars of the removals to hospital during 1920. Columns 19 to 23 of Table III. (see Appendix), show the removals for each district :—

	Total cases notified.	Cases removed to Hospital.	
		Number.	Percentage.
Small-Pox .. ..	—	—	—
Scarlet Fever .. ..	3615	2965	82·0
Diphtheria and Membraneous Croup	2358	1813	76·9
Enteric Fever .. ..	175	116	66·3
Total for 1920 ..	6148	4894	79·6

## Sale of Food and Drugs Acts.

## QUARTERLY REPORT OF SAMPLES TAKEN DURING 1920.

District,	Inspector.	Samples analysed during 1920.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Barnsley ..	J. H. Bundy ..	44	59	63	72	238
Central ..	A. Ross ..	42	86	109	100	337
Harrogate	H. Gamble ..	91	82	99	89	361
Mirfield ..	E. Ward ..	71	95	100	112	378
Pontefract	H. F. Wilkinson	75	111	84	77	347
Rotherham	J. Wilson ..	57	103	104	108	372
Shipley ..	J. Duce ..	62	55	93	84	294
Skipton ..	A. Randerson..	80	79	81	83	323
Sowerby ..	E. Bell ..	76	85	86	94	341
Total Samples taken by the County Inspectors ..		598	755	819	819	2991
Local Authorities ..		130	151	202	166	649
Private Purchasers ..		—	—	—	—	—
Total Samples analysed ..		728	906	1021	985	3640

After an adulterated sample of milk has been taken, it is sometimes necessary for the Inspector to see the cows milked, and take samples to test the quality of the milk direct from the cow. These are termed "cow samples," and the numbers taken are included in the above figures. During the year 1,445 samples of milk were taken by the County Council's Inspectors, and 604 by Local Authorities; included in these figures are 63 "cow samples" submitted by the County Council's Inspectors, and 5 by Local Authorities.

## RECORD OF SAMPLES FOR TEN YEARS, 1911-1920.

Year.	Total Samples submitted by			Total Examined.	Total Adulterated.	Percentage Adulterated
	County Council.	Local Authorities.	Private Purchasers.			
1911	2522	592	—	3144	158	5.1
1912	2753	617	—	3370	225	6.7
1913	2546	672	—	3218	167	5.2
1914	2668	744	4	3416	229	6.7
1915	2674	714	—	3388	179	5.2
1916	2543	729	—	3272	204	6.2
1917	2425	653	—	3078	319	10.3
1918	2201	581	—	2782	349	12.5
1919	2102	580	—	2682	231	8.6
1920	2928	644	—	3572	238	6.7

In the above table "cow samples" are not included.

The Inspectors have devoted some time to special sampling. Owing to complaints as to quality, numerous samples of milk were taken in Bentley-with-Arksey, Pontefract Borough, Wharfedale Rural District, Swinton, and Kiveton Park Rural District. The prevalence of neuritis in parts of the Wortley Rural District caused it to be suggested that some of the sugar sold at that time might be contaminated with arsenic, or that there might be something wrong with the flour. Samples of both articles were taken, but no trace of arsenic was found.

In the latter part of the year a conference of the Inspectors was held at the County Hall. Among others, such questions were discussed as the packing of samples, kind of samples to be taken, distribution of sampling over the respective areas of the Inspectors, and the best methods of sampling to discover adulteration. The discussions, and the exchange of notes and ideas by the Inspectors always prove very helpful.

The list of articles to be sampled was frequently revised during the year.

**Samples taken by Local Authorities.**—The following table shows how many of the 649 samples submitted by Local Authorities were taken by each Authority:—

Batley ..	55	Goole ..	17	Normanton ..	8
Bolton-on-Dearne	4	Horbury ..	12	Rawmarsh ..	11
Brighouse B.	24	Horsforth ..	2	Ripon ..	31
Castleford ..	11	Honley ..	2	Rothwell ..	39
Clayton West	4	Hoyland Nether	9	Sedbergh R.	2
Elland ..	21	Hebden Bridge	3	Shelley ..	3
Denby-with-		Ilkley .. ..	29	Shepley ..	6
Cumberworth	3	Keighley B. ..	54	Skelmanthorpe	3
Featherstone ..	15	Kiveton Park R.	24	Todmorden B.	18
Garforth ..	17	Marsden ..	7	Wakefield R.	6
Golcar ..	10	Mexborough ..	10	Thurstonland	2
Harrogate ..	100	Mirfield ..	1	Worsborough	3
Haworth ..	19	Pudsey .. ..	29	Whitwood ..	4
Hemsworth R.	30	Methley .. ..	1		

**Milk and Cream Regulations.**—All samples of milk and cream taken under the Sale of Food and Drugs Acts were examined for preservatives. There were only two offences, viz., a sample of milk contained .165 per cent. of boric acid, and one of cream 2 per cent.; the vendors were cautioned by the Legal Department.

The sale of preserved cream in the County Area is not very large, and all of the samples taken were found on analysis to be correctly labelled, and no offences against the Regulations in any other respect were discovered.



# TREATMENT OF VENEREAL DISEASES.

The following is a table showing the Venereal Treatment Centres and the number of attendances, etc., during 1920.

Name of Institution.	Days and Hours of attendance.		No. of New Patients attending Clinics during 1920.	No. of doses of Salvarsan Substitutes used at Clinics.	No. of In-Patient days.	No. of Out-Patient attendances.
	Men.	Women and Children.				
Bradford Royal Infirmary	.. Mondays and Saturdays at 9-30 a.m., Tuesdays at 6 p.m.	.. Mondays, 4 to 6 p.m. Tuesdays and Fridays, 10 a.m.	210	1043	731	4271
Dewsbury Infirmary	.. Mondays, 3 to 5 p.m. Thursdays, 6 to 10 p.m.	.. Mondays, 3 to 5 p.m. Thursdays, 6 to 8-30 p.m.	113	463	255	1594
Doncaster Royal Infirmary	.. Wednesdays, 4 to 6 p.m.	.. Fridays, 4 to 6 p.m.	164	798	45	2475
Goole, Bartholomew Hospital	.. Fridays, 8 p.m.	.. Fridays, 5 p.m.	88	222	—	614
Leeds General Infirmary	.. Tuesdays, 3 p.m. Wednesdays, 6-30 p.m.	.. Mondays, 3 p.m. Thursdays, 6-30 p.m.	805	4587	83	9051
Barnsley Clinic	.. Thursdays, 6 to 8 p.m. Saturdays, 3 to 5 p.m.	.. Thursdays, 3 to 5 p.m.	61	170	118	154
Halifax Royal Infirmary	.. Thursdays, 6-30 to 8-30 p.m.	.. Tuesdays, 3-30 to 5-30 p.m. and 6 to 8 p.m.	156	290	667	1105
Sheffield Royal Hospital	.. Tuesdays, 7 to 9 p.m. Fridays, 7 to 9 p.m.	.. Tuesdays and Thursdays, 11 a.m. to 1 p.m.	95	1148	8	410
Huddersfield Royal Infirmary	.. Tuesdays, 6-30 to 8-30 p.m. Thursdays, 7 to 9 p.m.	.. Mondays, 7 to 9 p.m. Fridays, 6 to 8 p.m.	123	666	57	1673
Keighley Victoria Hospital	.. Tuesdays and Thursdays, 7-30 to 8-30 p.m.	.. Tuesdays and Thursdays, 6 to 7 p.m.	190	782	17	2947
Oldham Royal Infirmary	.. Tuesdays, 8-30 p.m.	.. Tues., Wed. and Thurs., 3 p.m.	19	20	20	104
York County Hospital	.. Mondays, 3 to 4 p.m. Thursdays, 6 to 7 p.m.	.. Wednesdays, 3 to 4 p.m. Fridays, 7 to 7-30 p.m.	19	70	118	154
		Totals	2043	10259	2119	24552

In my Annual Report of last year I gave details of the Council's Scheme in accordance with the Public Health (Venereal Diseases) Regulations, 1916, showing the establishment and development of Treatment Centres up to date. During this year some improvement has taken place in the facilities for treatment under our scheme by means of changes in the internal arrangements at existing clinics and the establishment of new Clinics.

An analysis of the adjoining table shows that at some of the Clinics the number of new patients has decreased while the number of out-patient attendances has considerably increased. This would infer that patients are attending more assiduously for their treatment and that fewer are leaving off before the medical officer has been able to satisfy himself of cure. At other Clinics the number of new patients, as well as attendances, have noticeably increased, which is no doubt due to the more wide-spread knowledge of the presence and usefulness of the Clinic and the educational propaganda pursued in the neighbourhood. The latter is observable in the case of Leeds Infirmary, which at present has to cater for the West Riding patients from the area around, a congested industrial district unfortunately badly infected with Venereal Diseases, and in which it was hoped that a suitable and more convenient Centre could have been established. I consider this area to be inadequately supplied with facilities for efficient treatment, but the great necessity for economy in administration has intervened, and only recently has the provisional consent of the Ministry of Health been given to the presentation of a scheme for this purpose.

It would seem at first unfortunate that the Ministry could not see their way to sanction the scheme of the City of Wakefield with whom the County Council had intended to co-operate, but at the time of writing information has come to hand that the Committee of the Clayton Hospital has re-considered its decision and would welcome a scheme for the establishment of a Clinic there. As the local Hospital is without doubt the ideal place for such a clinic this information is appreciated, and also because this particular clinic may be made a centre for much valuable work in clinical investigation and research owing to its proximity and immediate association with the Bacteriological Department of the County.

The number of new patients attending at Bradford has been somewhat reduced owing no doubt to a Centre being opened at the Victoria Hospital, Keighley, in January, 1920, which has now necessitated an additional session per week to provide the necessary time for advice and treatment.

At all the other Clinics either in connection with Hospitals, Infirmarys or under this Authority an inspection has been made by an Officer of the Ministry of Health, and thereafter suggestions which were made by the Ministry have been considered and with



all due consideration for economy agreed to in most essentials, the County Council bearing their share of the cost in proportion according to their agreement.

At Huddersfield and Barnsley the Centres are doing excellent work, and the agreements with the County Council only await signature for completion. This has not in any way hindered treatment, as a provisional arrangement in each case had been made. The establishment of a Clinic at Wombwell has been considered inadvisable in view of the excellent facilities at Barnsley.

A matter of considerable importance in connection with the Clinics has been the facilities arranged for irrigation and the intermediate and early treatment by skilled male attendants and nurses. This is now possible in a great number of the large Clinics during any time of the day and at all the others at suitable hours for males and by arrangement with the nurse for females, under the supervision and instruction of the Medical Officer of the Clinic. A useful arrangement has been made with the Leeds Authority whereby girls of the rescue class and unmarried mothers suffering from Venereal Diseases can be housed and treated until cured at their Hostel (The Hope Hospital), the County Council paying the cost per head of West Riding patients.

**Provision of Salvarsan Substitutes to Medical Practitioners.**—The County Council have issued free of charge these drugs to 30 Medical Practitioners, an increase over last year of 7, and the number of doses issued was 103.

**Propaganda and Educational Work.**—The work under this heading has been carried on very successfully during the past year and with gratifying results.

The Cinema film “ Damaged Goods ” has been exhibited at a large number of places in the Riding during the winter months. In each case the exhibition was preceded by a short address given by the Medical Officer of Health for the district pointing out the prevalence of the diseases and the advisability of early treatment.

At a meeting of the local branch of the British Medical Association, the County Medical Officer opened a discussion on “ The proposition as to whether our arrangements and propaganda methods in relation to Venereal Diseases are on correct lines.” He also lectured to the members of the Wakefield Paxton Society. Dr. Frew (Venereal Diseases Officer) lectured on several occasions and at each lecture the attendance was good and the audience very appreciative.

Under the auspices of the National Council for Combating Venereal Diseases, a Provincial Branch Conference was held at Leeds on the 5th and 6th October, 1920, and was well attended; the delegates from the County Council were County Councillors J. Newton and J. Drabble, the County Medical Officer, and Dr. Frew. The spring programme of lectures had unfortunately to be cancelled owing to the industrial unrest and the curtailment of train services.



## HOUSING.

By the end of the year 1919 the majority of Sanitary Authorities in the West Riding had made their Return (D. 89) to the Housing Commissioner as required by the Housing and Town Planning Act of 1919, but the erection of dwelling houses was embarrassed owing to the difficulties in the cost of labour and material, and the increased production of "luxury buildings" and such like. Still at the beginning of the year 1920, the preparation of Housing Schemes continued unabated, and the erection of dwellings continued to be hindered by high prices. Houses could be erected in 1914 at a cost, say, of £300, but this figure had risen to nearly £1,000 per house in 1920. As a result new methods of construction were evolved, and building bye-laws suspended temporarily. Economics, so called, began to show in the designing of houses; the result being that the minimum standard became the maximum standard, and comfort and construction suffered in efficiency.

The housing needs of the West Riding Administrative area, from the Returns to the Housing Commissioner, showed a total of 42,396 houses as necessary, but the schemes exhibited provision for 24,806 houses, though ultimately these figures were increased.

The Tables appended display the position attained at the end of 1920 as far as can be ascertained from the reports sent to this Department on Table D. and revised by official returns.

It should be added that 391 houses (233 Urban and 158 Rural) were built by private enterprise under the Government Subsidy Scheme.

The general concensus of opinion has been expressed in reports of local Medical Officers of Health that there is a scarcity of houses, and only in eight districts (six Urban and two Rural) is it recorded that no houses are necessary, but these Urban Districts are of a rural nature.

Overcrowding is reported to be general, and it is stated that it cannot be effectually dealt with owing to the scarcity of houses. Only 420 instances (273 Urban and 147 Rural) were dealt with, and it is also stated that there is no activity in house building except under the Government Assisted Housing Scheme. Only 740 (625 Urban and 115 Rural) were dealt with during 1920 against an average of 5,000 per annum before the War.

No Authority in the Riding appears to have given any pecuniary assistance to Public Utility Societies, nor has there been any representation as to unhealthy areas or obstructive buildings during the year, and consequently no encouragement for reconstruction schemes.

Two Authorities acquired houses for conversion into separate tenements. Neither the general public nor the Parish Councils have made any complaint as to unfit houses.

Only one Sanitary Authority has taken action under the Small Dwellings Acquisition Act of 1889.

Eight Public Utility Societies were formed—four in Urban Districts—Adwick-le-Street, Baildon, Horsforth and Thurnscoe, and four in Rural Districts, namely, Doncaster, Pontefract, Rotherham and Thorne, and of the 477 houses commenced 209 have been completed.

The number of inspections made in regard to Housing work under the Housing of the Working Classes Acts and the Housing (Inspection of District) Regulations of 1910 has been as follows :—

Authorities.			Results.
Urban.	Rural.	Total.	
95	25	120	Inspections totalling 27,355 houses, of which 20,305 were in Urban Districts and 7,050 in Rural Districts.
28	3	31	No inspections.

	Urban Districts.	Rural Districts.	Total.
Houses found unfit .. .. .	615	62	677
Unfit houses represented to Authorities for closing .. .. .	106	61	167
Closing Orders made .. .. .	33	22	55
Houses with defects remedied without Closing Orders .. .. .	93	3	96
Houses made fit after Closing Orders .. .. .	21	3	24
Cases of overcrowding dealt with .. .. .	273	147	420
New houses built by private enterprise (Working Class ) .. .. .	280	475	870
(Other) .. .. .	82	33	
Houses built by private enterprise under State-Aided Housing Schemes .. .. .	233	158	391

The above figures show that there has been an increase of about 9,000 inspections over 1919, but they also indicate that there has not been that attention given to survey work which is required by the Housing (Inspection of District) Regulations, 1910, or the Housing and Town Planning Act, 1919.

A number of Rural Districts have failed to forward copies of representations, complaints, informations or closing orders which have been made to them by their Medical Officers, Inspectors of Nuisances, or other Officers in regard to Housing, which is necessary under the Housing Acts.

Action by this department in regard to Housing during the year has embraced the giving of assistance to the Housing Commissioner for Yorkshire in relation to the Housing Returns made



by Local Authorities on Form D.89, and by Conferences with him from time to time at Leeds, and also as to proposed joint action by several Authorities in the neighbourhood of Castleford.

Conferences have also taken place with representatives of local Authorities in regard to housing conditions in their area and we have attended Conferences of the National Housing and Town Planning Council, and the International Housing Conference which was held in London.

We have also reported fully on the housing conditions in the Urban Districts of Birkenshaw, Castleford, Garforth, Heckmondwike, Holme, Holmfirth, Kirkheaton, Linthwaite, Rothwell, and Shelley, and on the Rural Parish of Beal in the Pontefract Rural District, and the Parish of Wadsworth in the Todmorden Rural District.

County Borough Extensions hampered the progress of District surveys on account of the large amount of work involved in providing evidence for the Legal Department in regard to Rotherham, Sheffield and Wakefield.

### Town Planning.

The principal events relating to Town Planning were the Conferences of Local Authorities at Doncaster, and Barnsley, regarding Regional Town Planning in districts surrounding these towns, and enquiries at Adwick-le-Street, Linthwaite and Selby Urban Districts as to Schemes being promoted by their Councils.

### Summary of Housing Work during 1920.

No. of Authorities without Schemes.	No. of Authorities with Schemes.	SITES.				LAY-OUTS.	
		Applications submitted.		Applications approved.		Submitted.	Approved.
		No.	Acreage.	No.	Acreage.	No.	No.
12	Urban. 111	205	1903·87	164	1651·16	153	144
7	Rural. 21	165	580·78	116	770·57	111	96
19	132	370	2484·65	280	2421·73	264	240
151							



Summary of Housing Work, 1920 (continued).

HOUSE PLANS.				TENDERS.				Works commenced.		Houses occupied.	
Submitted.		Approved.		Submitted.		Approved.					
No. of Houses.	Parlour.	No. of Houses.	Parlour.	No. of Houses.	Parlour.	No. of Houses.	Parlour.	No. of Houses.	Parlour.	No. of Houses.	Parlour.
Scullery.	Parlour.	Scullery.	Parlour.	Scullery.	Parlour.	Scullery.	Parlour.	Scullery.	Parlour.	Scullery.	Parlour.
6464	3529	6073	3318	3822	2072	3427	1445	1833	881	244	142
3597	2104	2829	2042	2471	1848	2089	1546	810	494	104	41
10061	5633	8902	5360	6293	3920	5516	2991	2643	1375	348	183
15694				10213				4018			
				8507				531			

## PART II.

### THE WORK OF THE BACTERIOLOGICAL LABORATORY.

The total number of specimens examined in the Laboratory during the year, including those from the County Boroughs of Halifax, Dewsbury, Wakefield and Barnsley, was 22,675. The number of specimens (exclusive of Venereal specimens which are given below) examined for the County Borough of Dewsbury was 1,093 at a cost of £102 8s. 0d. to the authority; the number examined for the County Borough of Wakefield was 830, the cost to the authority being £82 4s. 0d. The following table gives the figures for 1920 in comparison with those for the previous five years :—

YEAR.	Serum reaction for Enteric Fever.	Sputum for Tubercle Bacilli.	Suspected Diphtheria.	Venereal Disease.	Miscell- aneous.	Total.
1915	1736	3906	7655	—	2900	16197
1916	543	3619	7976	73	2719	14930
1917	942	4205	5709	779	2306	13941
1918	434	4995	5129	1492	1883	13933
1919	361	4581	7905	2548	2118	17513
1920	347	6368	10245	2844	2871	22675

During the year, 374 specimens were received which required biological examination.

**Diphtheria.**—During the year, 10245 swabs were examined for the Diphtheria bacillus. Medical Officers of Health and Practitioners submitted 9594 specimens from suspected cases and convalescents of which 1531 were positive.

The School Medical Inspectors submitted 53 swabs from suspected cases among children attending school and in 5 cases the result was positive.

Central Staff collected 521 swabs in connection with school outbreaks of diphtheria and in 17 cases the result was positive.

**Enteric Fever.**—Examination for the Widal Reaction. During the year 347 specimens of blood were examined for the Widal Reaction and 103 were found to give a positive result.

Examinations for the Bacillus Typhosus. The number of specimens examined for the Bacillus Typhosus was 78 and consisted chiefly of samples of urine and faeces from convalescent cases and suspected carriers. Of these, 2 specimens of faeces were found to contain the Typhoid Bacillus.

**Paratyphoid Fever.**—Five specimens (2 of blood, 1 of sputum and 1 of faeces) were examined for the Bacillus Paratyphosus. 1 specimen of blood gave a positive reaction with the Bacillus Paratyphosus.

**Dysentery.**—Six specimens (5 of faeces and 1 of blood) were examined for the *Bacillus Dysenteriae* with negative result in each case.

**Tuberculosis.**—*Sputum.*—The number of specimens of sputum examined for tubercle bacilli was 6,368 and in 1,237 the bacillus was found.

Medical Officers of Health and Practitioners submitted 2,573 specimens, the Tuberculosis Staff 3,735 (from Sanatoria 1,011, and from Dispensaries 2,724) and 60 specimens were received from Hospitals.

*Urine.*—Ninety-two specimens of urine from suspected cases of tuberculosis of the kidney and bladder were examined and in 8 the bacillus was found.

*Other Specimens.*—The remaining specimens examined for tubercle bacilli were 14 of pus, 9 of faeces, 5 of pleural fluid, 2 of glands, 2 fluid from knee, 1 fluid from pericardium, 1 fluid from abscess, 1 synovial fluid, 1 synovial membrane, 1 abdominal fluid, and 1 of lung. In 4 of these, the tubercle bacillus was found.

**Bovine Tuberculosis.**—*Milk.*—Twenty-two specimens of milk (12 from individual cows and 10 mixed) were examined with negative result.

*Other specimens.*—Forty-six specimens were examined, namely :—30 of glands, 8 of lung, 3 of flank, 2 portions of diaphragm, 1 of kidney, 1 of liver and 1 of butter. In 14 of these the tubercle bacillus was found.

**Ringworm.**—The number of specimens of hairs and scales examined for the diagnosis of ringworm was 1,908 and a positive result was obtained in 956. Medical Officers of Health and Practitioners submitted 1,417 of which 648 were positive, the School Staff submitted 164 of which 121 were positive, and the Central Staff submitted 327 of which 187 were positive.

**Anthrax.**—Thirty-seven specimens were examined for the anthrax bacillus. Of these 24 were from suspected cases of malignant pustule and in 4 cases the result was positive.

The particulars of the positive cases were as follows :—

- No. 1. Male, age 18, Piecer, pustule on right cheek (Dewsbury).
- No. 2. Male, age 18, Electrician, pustule on side of neck (Dewsbury).
- No. 3. Male, age 24, Willeyer, pustule over right frontal bone (Dewsbury).
- No. 4. Male, age 21, Railway Fireman, pustule on cheek (Mirfield) contracted by using an infected shaving brush.



*Other specimens.*—The remaining specimens examined were :—7 separate shaving brushes (1 of which was found to be infected). 3 consignments of shaving brushes (1 of which was found to contain infected brushes) and 1 specimen of horn shavings.

**Bovine Anthrax.**—Two specimens from cows suspected to have died from anthrax were examined and in 1 the bacillus was found

**Cerebro-Spinal Fever.**—Twenty-five specimens of cerebro-spinal fluid were examined for the presence of the meningococcus. In 1 of these the meningococcus was found which confirmed the diagnosis of cerebro-spinal fever; in 6 the tubercle bacillus was found which showed that the disease was tuberculous meningitis, and in 18 the result was negative.

Fifteen swabs from the throats of persons who had been in contact with cases of cerebro-spinal fever were examined with negative result.

**Ophthalmia Neonatorum.**—Sixteen specimens of pus from the eyes of infants suffering from ophthalmia, suspected to be of gonorrhoeal origin, were examined and in 1 case the gonococcus was found.

**Water.**—Five samples of water were examined of which 2 were found to be polluted.

**Malaria.**—Seventeen specimens of blood were examined for malarial parasites and in 2 cases the result was positive, both of them being of the benign tertian type.

**Vaccines.**—Ten vaccines, 6 from specimens of pus, 3 from sputum and 1 from urine were prepared.

**Mussels.**—Six samples of mussels were examined and all were found to be polluted.

**Food Poisoning.**—Two specimens, viz. :—1 stomach contents, and 1 of potted meat were examined for food poisoning organisms with negative result.

**Silicosis.**—Three post-mortem examinations were made on suspected cases of silicosis and the lungs were examined microscopically. Two cases showed tuberculosis together with silicosis.

**Venereal Disease.**—The number of pathological examinations performed under the Public Health (Venereal Diseases) Regulations, 1916, was 2,844 Of these 1,190 were made on behalf of the County Boroughs of Halifax, Dewsbury, Wakefield and Barnsley. At the request of Practitioners 49 specimens were collected at the Laboratory by the Pathologist.

The following table gives the details of the examinations of specimens from West Riding Patients :—

Nature of Test.		Number of Tests.
For detection of Spirochaetes	For Treatment Centre ..	43
	For Practitioners .. ..	8
For detection of Gonococci	For Treatment Centre ..	187
	For Practitioners .. ..	159
For Wassermann Reaction	For Treatment Centre ..	934
	For Practitioners .. ..	323
	Totals ..	1654

Similar examinations were made for areas outside the Administrative County, viz. :— Halifax 670; Dewsbury 172; Wakefield 166; Barnsley 182.

**Tissue for Histological Examination.**—Forty-seven specimens of tissue were examined histologically chiefly to determine the presence or absence of cancer, viz. :—8 specimens from the breast, of which 5 were cancerous, 6 specimens of tissue from the tongue, 5 specimens of glands of which 1 was cancerous, and 2 tuberculous, 3 of uterus, 2 of tonsil, 2 placental moles, 1 tissue from rectum, 1 tissue from femur (cancerous), 1 tissue from neck (cancerous), 1 tumour of kidney (cancerous), 1 tissue from lung, 1 tumour from the back (cancerous), 1 tumour from finger, 1 tissue from abdominal wall (cancerous), 1 skin from shoulder (tuberculous), 1 of prostate (cancerous), 1 of lip, 1 of foot (malignant tumour), 1 of intestine (cancerous tumour), 1 of stomach, 1 of spleen, 1 of liver, 1 of upper jaw (malignant tumour), 1 of pancreas, 1 of colon, 1 from knee joint, and 1 tissue from gum.

**Other Specimens.**—The remaining specimens included the following :—Urine for bacillus coli and other organisms, 122, Sputum for organisms other than tubercle bacilli 157, Blood films for cytological examination 68, Pus for organisms 29, Swabs for Vincent's Bacillus and Spirochaetes 17, Swabs for organisms 13, Samples for Flies for identification 3, Faeces for worms 2, Vomited material 2, Cultures of *B. diphtheriae* from nasal swabs for virulence 2, Liver from Rabbit for worms 1, Sputum for evidence of cancer 1, Faeces for occult blood 1, and 1 nasal swab for organisms.



LIST OF SANITARY DISTRICTS IN THE WEST RIDING SHOWING THE  
NUMBER OF SPECIMENS RECEIVED FROM EACH DURING 1920.

Urban Districts :—		Urban Districts—		Urban Districts—	
Adwick-le-Street ..	178	Ilkley .. ..	115	Stocksbridge ..	15
Altofts .. ..	21	Keighley B. ..	143	Swinton .. ..	11
Ardsley .. ..	17	Kirkburton ..	46	Thurlstone ..	22
Ardsley, East and		Kirkheaton ..	23	Thurnscoe ..	12
West .. ..	22	Knaresborough ..	50	Thurstonland ..	—
Baildon .. ..	21	Knottingley ..	3	Tickhill .. ..	2
Barkisland ..	—	Lepton .. ..	24	Todmorden B. ..	100
Barnoldswick ..	61	Linthwaite ..	10	Wath-upon-Dearne	18
Batley B. .. ..	220	Luddendenfoot ..	6	Whitley Upper ..	—
Bentley-with-Arksey	26	Marsden .. ..	42	Whitwood .. ..	4
Bingley .. ..	208	Meltham .. ..	4	Wombwell .. ..	95
Birkenshaw ..	2	Methley .. ..	6	Worsborough ..	7
Bolton-upon-Dearne	2	Mexborough ..	32	Yeadon .. ..	14
Brighouse B. ..	60	Midgley .. ..	—		
Burley-in-Wharfedale	11	Mirfield .. ..	103		
Calverley .. ..	66	Monk Bretton ..	4		
Castleford .. ..	135	Morley B. .. ..	103		
Clayton .. ..	14	Mytholmroyd ..	4		
Clayton West ..	20	New Mill .. ..	8		
Cudworth .. ..	5	Normanton ..	82		
Darfield .. ..	4	Oakworth .. ..	8		
Darton .. ..	8	Ossett B. .. ..	147		
Denby and		Otley .. ..	77		
Cumberworth ..	6	Oxenhope .. ..	3		
Denholme .. ..	8	Penistone .. ..	69		
Dodworth .. ..	8	Pontefract B. ..	29		
Doncaster B. ..	718	Pudsey B. .. ..	27		
Drighlington ..	2	Queensbury ..	36		
Earby .. ..	30	Rawdon .. ..	72		
Elland .. ..	25	Rawmarsh .. ..	61		
Emley .. ..	2	Ripon C. .. ..	43		
Farnley Tyas ..	—	Rishworth .. ..	3		
Farsley .. ..	19	Rothwell .. ..	52		
Featherstone ..	75	Royston .. ..	—		
Flockton .. ..	12	Saddleworth ..	36		
Garforth .. ..	32	Scammonden ..	—		
Gildersome .. ..	9	Selby .. ..	223		
Golcar .. ..	21	Shelf .. ..	3		
Goole .. ..	42	Shelley .. ..	8		
Greasbrough ..	—	Shepley .. ..	14		
Greetland .. ..	12	Shipley .. ..	36		
Guiselley .. ..	81	Silsden .. ..	6		
Gunthwaite and		Skelmanthorpe ..	10		
Ingbirchworth ..	—	Skipton .. ..	136		
Handsworth ..	44	Slaithwaite ..	35		
Harrogate B. ..	255	South Crosland ..	1		
Haworth .. ..	189	Southowram ..	6		
Hebden Bridge ..	77	Sowerby .. ..	—		
Heckmondwike ..	60	Sowerby Bridge ..	20		
Hipperholme ..	27	Soyland .. ..	14		
Holme .. ..	1	Spenborough—			
Holmfirth .. ..	58	Cleckheaton ..	55		
Honley .. ..	18	Gomersal .. ..	27		
Horbury .. ..	46	Liversedge ..	37		
Horsforth .. ..	46	Springhead ..	1		
Hoyland Nether ..	39	Stainland-with-Old			
Hoylandswaine ..	3	Lindley .. ..	12		
Hunsworth .. ..	—	Stanley .. ..	2		

### PART III.

#### MATERNITY AND CHILD WELFARE.

The year 1920 has witnessed developments in the activities grouped under this comprehensive title. School Medical Inspection (dealt with in a separate Report) has returned to the full scheme of inspection and treatment.

New Child Welfare Centres to the number of 19 have been established usually at the request of the inhabitants for expert guidance in the rearing of children. The attendances have fluctuated in the first few months and then settled down to a satisfactory level justifying the selection of the town for a Centre. Mothers of first babies seem to be specially appreciative of the advice which goes far to minimise their want of experience.

Maternity Homes on account of expense have not made much progress.

The supervision of midwives continues, and the altering character of the personnel of the midwifery service is noted below. The ultimate goal is to secure the appointment of educated women who will train for midwifery work. Women who feel a call for social service would, in this sphere, find an occupation which, if at times arduous, would give great scope for their industry and energy.

*Midwives Acts, 1902 and 1918.*—The number of midwives who notified their intention to practise during the year was 559, classified as follows :—

Total No. of Midwives.	Trained.		Untrained or Bona-fide.
	Attached to District Nursing Associa- tions.	Independent.	
559	128	152	279
	280		

Up to the present time there has always been a preponderance of untrained over trained midwives in the West Riding, but for the past few years there has been a steady increase in the number of trained midwives in practice, and the above table for 1920 shows that they are now equal in number. This is largely the result of the County Council's policy of training midwives by means of scholarships and establishing them by subsidies in districts where the midwifery service is poor.

During the year 1920, 26 bona-fide midwives resigned on account of old age and infirmity; two were removed from the roll by the Central Midwives' Board for infringement of their rules and five died.

The above table giving the numerical strength of "trained" and "untrained or bona-fide" midwives respectively does not



indicate the amount of work done by each. There are many untrained midwives on the roll who do very little work or none at all, but do not resign because they wish to retain the right to practise if they should choose to do so.

The number of cases of confinement attended by Midwives during the past four years, is as follows :—

1917	1918	1919	1920
12851	11544	13678	18540

In accordance with Section 6 (para. 2) of the Midwives Act, 1918, three claims by Midwives for compensation for the loss of 12 cases while undergoing disinfection were received, and the Committee authorised the payment of £1 1s. 0d. in each case.

The supervision of midwives is exercised by the County Medical Officer, his Assistants and two Inspectresses. The Health Visitors make quarterly visits to the midwives in their areas, and inspect their books and in case of need furnish confidential reports which result in one of the Inspectresses making a special enquiry. In all, 1210 visits of inspection were made by the staff. Several midwives have been advised by the Inspection Staff that their work or behaviour was open to criticism. More rigorous measures were taken in seven other cases in which the midwives were cautioned by the County Medical Officer for definite, if minor, infringement of the rules, and two midwives were severely reprimanded by the Chairman and a Member of the Child Welfare Sub-Committee. In the last resort, two midwives (as mentioned above) were removed from the roll by the Central Midwives Board.

The following suggestions by way of amendment or addition to the rules were forwarded to the Central Midwives Board :—

Rule 21 (para. 3) “ *Prolonged Labour* ” is a condition requiring Medical attention.

Rule 21 (para. 3) Include “ *Breech Presentation.* ”

Rule 21 (para. 4) Add “ *Severe Headache and Loss of Sleep.* ”

Rule 21 (para. 5) Add “ *Markedly undersized* ” to dangerous Feebleness.

Rule 21 (para. 5) Note 4. To be altered as follows :—

“ And when there is a purulent discharge commencing within 21 days from the date of birth the Midwife must, if in attendance, notify the Local Sanitary Authority unless the case has already been notified by a Registered Medical Practitioner.”

The number of notifications received from the midwives during 1920 is shown in the following table in comparison with the figures for the previous five years to show the movements of this work historically :—

	1915	1916	1917	1918	1919	1920
Notifications of sending for Medical Help .. ..	981	1054	1046	1222	1821	2345
Notifications of Death of Child	53	58	54	59	67	60
Notifications of Death of Mother	11	8	16	4	5	4
Number of Inquests reported ..	20	29	13	22	21	20
Notifications of Still-Births ..	273	278	212	240	350	367
Notifications of Puerperal Fever	31	23	37	11	25	51
Notifications of Ophthalmia Neonatorum .. ..	145	117	117	141	133	153
Notifications of other Infectious Cases .. ..	6	6	8	5	17	15
Notifications of Laying-Out Dead Body .. ..	23	17	36	35	68	48
Notifications of Liability to be a Source of Infection ..	—	—	1	7	27	41
Notifications of Artificial Feeding	—	—	—	—	89	118

Last year's report called attention to the "slight increase in the number of trained midwives and the steady decrease in the number of untrained women." This progress has continued during 1920. Concurrently the "Notifications of Sending for Medical Help" have steadily increased year by year. This increase in the number of notifications is the expression of the change of the personnel of the West Riding midwifery service. It is not too much to say that it implies a greater degree of care of parturient women and a higher level of service.

*Still-Births* are notified by the midwives attending the cases. The information furnished by the notification forms is not sufficiently reliable to form the basis of any calculation or the cause of intra-uterine death. The information is helpful or otherwise, according to the ability of the midwife.

Complete investigation would necessitate the procuring of all specimens of still birth and a colossal amount of subsequent laboratory work.

The following table affords some indication of the principal causes for which midwives have sought the attendance of medical practitioners, during the past year:—

Adherent Placenta ..	121	Brought forward ..	1571
Placenta Praevia .. ..	11	Uterine Inertia .. ..	37
Ruptured Perineum ..	297	Still-Birth .. ..	49
Ante-partum Haemorrhage	21	Eclampsia (Convulsions)	15
Post-partum Haemorrhage	72	Contracted Pelvis ..	28
Premature Birth .. ..	150	Hydramnios (Excessive	
Dangerous Feebleness ..	94	Fluid) .. ..	2
Discharge from Infants' eyes	153	Albuminuria .. ..	7
Abortion or Miscarriage ..	78	Pemphigus (Skin Disease)	6
Prolonged Labour ..	442	Pyrexia (Fever) ..	84
Obstructed Labour ..	132	Breech Presentation ..	40
Carried forward	1571	Carried forward	1839



Brought forward	1839	Brought forward	1997
Undefined Presentation ..	30	Phlegmasia Alba Dolens	
Transverse do. ..	38	(White Leg) ..	2
Funis do. ..	20	Spina Bifida (Tumour of	
Face do. ..	11	Back) .. ..	7
Hand do. ..	7	Syphilis .. ..	2
Foot do. ..	21	Rigid Os. .. ..	6
Occipito Posterior do.	26	Mastitis .. ..	8
Purulent Discharge ..	5	Miscellaneous .. ..	333
Carried forward		Total ..	2355

*Doctors' Fees.—Emergency Cases.*—261 Claims from medical practitioners were received, amounting to £990 13s. 0d., and this sum is made up as follows :—

	£	s.	d.	
344 cases	552	4	6	Whole fees recoverable.
122 „	190	4	6	Half-fees recoverable.
166 „	248	4	0	No fees recoverable.
632 „	990	13	0	

Of this total, £647 6s. 9d. is recoverable, leaving the sum of £343 6s. 3d. expended by the County Council towards relief in necessitous cases.

*Midwives' Fees.—Necessitous Cases.*—Under the County Council's scheme for contributing to the payment of midwifery fees in necessitous cases, 255 claims were received and £155. 0s. 6d. paid to midwives during the year.

*Subsidies to Midwives.*—During the year 17 subsidies were granted to trained midwives in accordance with the scheme adopted by the County Council.

Two were cancelled by the Committee, the reasons being as follows :—

One midwife admitted to sanatorium.

One midwife transferred to another area.

The districts in which these subsidised midwives have been placed, are as follows :—

Worsborough	Hoyland	Skelmanthorpe
Knottingley	Pontefract	Batley
Morley	Penistone	Birstall
Sowerby Bridge	Ardsley	Shipley
Featherstone	Queensbury	Bramley
		(Rotherham R.)

*Training of Midwives.*—During the year 10 Midwifery Scholarships were granted.

Of these, two have been successful in the examinations of the Central Midwives Board, and are now practising in the West Riding Administrative Area. The remainder are still in training.

Six pupils who have been previously granted scholarships were released from their agreement by the Committee upon the repayment of fees expended by the County Council. Two were cancelled owing to unsuitability, and one on account of ill-health.

### *Ophthalmia Neonatorum.*

According to our figures 254 cases of Ophthalmia Neonatorum were notified by the local Medical Officers of Health, and it is highly probable that a good many of these embrace the 153 suspected cases notified by the midwives by means of the Medical Aid Notices.

It must be noted however that as a midwife is bound to call in a Doctor to any case in which she notices "inflammation of, or discharge from, the eye, however slight," the diagnosis of Ophthalmia Neonatorum is not always confirmed by the doctor called in.

Health Visitors are furnished with sterile swabs and microscopic slides which they forward to the County Bacteriological Laboratory for the diagnosis of Ophthalmia Neonatorum. In 1920, 16 were submitted to the bacteriologist and the gonococcus was found in one case.

### *Areas inadequately supplied with Midwives.*

During 1920, further progress was made with the scheme of establishing an adequate midwifery service in the rural areas of the Riding.

Five Nursing Associations were formed, all of them performing the combined duties of Health Visiting, School Nursing, Midwifery and District Nursing (Flockton, Earby, Ouseburn, Arthington and North Stainley).

The Boroughbridge Nursing Association who had only previously performed district nursing and midwifery agreed to appoint an additional Nurse and take on the work of health visiting and school nursing.

Three of these Nursing Associations, namely :—Flockton, Ouseburn and Arthington became affiliated to the West Riding County Nursing Association.

The following Nursing Associations who performed on behalf of the County Council the work of Health Visiting and School Nursing found, that owing to the heavy nature of district work, they could not satisfactorily carry on with these duties, and terminated their agreement with the County Council, and in each case the County Council appointed a whole-time Health Visitor and School Nurse :—Otley U.D., Dodworth U.D., and Wetherby Rural Districts.



There are now 65 Nursing Associations affiliated to the West Riding County Nursing Association employing 72 nurses.

Three County Scholarship pupils doing midwifery work only are employed by Associations affiliated to the County Nursing Association.

Reports of affiliated districts show that 52 Associations took 951 midwifery cases.

In September, the Child Welfare Sub-Committee increased the grants to Nursing Associations from £10 to £16 per thousand population served, and in rural districts with a very wide area and limited subscriptions a small grant-in-aid for midwifery work was given in addition, the grant for all duties in such cases usually not amounting to more than £40 per annum in each area.

### *Maternity and Child Welfare Centres.*

Maternity and Child Welfare Centres have now been opened in 46 places. The value of infant life has been increasingly realised for many years, and various agencies have been at work to save infant life.

Statistics of Infant Mortality are no longer regarded as having a merely academic interest.

Investigations into the deaths of children under one year of age have shown that these are often caused by ignorance of child rearing on the part of the mothers. Where ignorance is not the actual cause it is often a contributory factor—for 80% of all children born are regarded as healthy at birth. Even those born prematurely who are often very weakly can be successfully reared. This furnishes strong grounds for the presumption that it ought to be possible to rear almost all of the children born strong and healthy.

The knowledge that infant mortality was largely due to preventable causes, *i.e.*, ignorance of infant management on the part of mothers led to the establishment of the first "School for Mothers." Unfortunately there is as yet no such school in this Riding but some such work takes place in the ante-natal clinics.

Interest in the successful rearing of children although displayed in many ways such as anxiety to secure good sanitation, provision of good milk supply, remission of income-tax for each child under sixteen, agitation for the endowment of motherhood, provision of Creches and Nursery Schools, legislation to restrict the employment of children out of school, exclusion from public houses—finds its highest expression at present in Maternity and Child Welfare Centres where mothers can have their (presumably) healthy children supervised by a medical man and a nurse, and can bring their perplexities and difficulties for solution and obtain advice about the rearing of children. The aim of the centres is thus advisory and educational, and this has an inevitable corollary. The educational role of the centres has a considerable bearing on policy, *i.e.*, this branch of education should, like other branches, be within the reach of everyone who might be in need of it.

If it can be shown that the educational side of the centres is meeting a distinct need, as mothers attending the centres readily admit it does, the Medico-Sociological Committee of the British Medical Association enquiring into "The causes of the Diminution of Infant Mortality" were not able to factorise specifically the recent diminution, but all the witnesses examined "ascribe a considerable proportion of the diminution of Infant Mortality to Maternity and Child Welfare work."

Financial conditions which at present delay the realisation of these aims should not, however, be allowed to obscure the ultimate goal, which is to bring this education to all those who may be in need of it and desire it.

The scope of Maternity and Child Welfare Centres has up to the present been almost entirely limited to the examination and supervision of babies. Work in ante-natal hygiene for expectant mothers is done in two of the centres, and from this unobtrusive beginning is likely to grow.

Other subsidiary activities are the supervision of children under five years of age, and the treatment of Minor Ailments of School Children.

The conduct of Maternity and Child Welfare Centres is almost entirely in the hands of the medical officer in charge and of the nurse. The nurse, with the help of the Voluntary Committee, manages the waiting-room, does the registration and the weighing, retails the tea without which no centre is complete, and forwards to the medical officer the babies who need examination and the mothers who need advice. The actual details of this work are largely determined by the character of the buildings and the talents of the nurse for management.

No attempt has been made to impose a routine practice on the medical officers in charge of centres. It is felt that in a movement which is barely out of its infancy that only a minimum amount of instructions should be prescribed so that Medical Officers (and nurses) might develop the work each according to his own ingenuity and versatility. It is hoped that what is lost in uniformity will be compensated by gain in originality.

One of the centres may be taken as illustrating this. The Medical Officer from time to time gives collective instruction in hygiene. The nurse carries out an original idea of her own. She asks the mothers who attend the centre to write down any difficulties which they encounter in the management of their children's health. The slips on which these difficulties are written are put in a box as the mothers leave. The nurse takes them home and is able to think the matter over leisurely and if necessary to consult books on the subject. If she feels unable to deal with any difficulty she passes it on to the doctor. These notes provide the doctor and nurse with subject matter for collective instruction at the next session of the centre. This proceeding gives great value to the educational work, being based, as it is on difficulties actually encountered. The lectures have as far as



possible been illustrated by specimens. This is much appreciated by the mothers. "The Centre" is very popular and the mothers attending it show great avidity for instruction based on the doctor's accurate knowledge and practical experience.

Other educational activities of the centres are the displays of model garments which can be made at relatively small cost. These models, combining as they ought to do, complete efficiency and great comeliness are admired, and the patterns are in much demand.

The social side of the centres is not neglected but is not as well developed as it might be. One centre has a piano and this is a very successful centre—though it is not suggested that its success is due to the piano. It is in fact due to the value of the medical service and the nurse's strong management.

Other centres have held bazaars and whist-drives. While the cynic may describe these forms of mitigated blackmail as "anti-social"—the proceeds from one town have enabled five boys and six girls to go to a Convalescent Home at Filey.

Quite possibly Child Welfare Centres may have another and unsuspected possibility. It may become a channel of information from the County Medical Officer to the mothers in circumstances of treatment of epidemics by infectious disease. Two diseases, Measles and Whooping Cough run their course practically unaffected by any action taken by the Medical Officer of Health to control them. The reason for this failure to control them is this:—that the children affected are infective for some days before the appearance of the symptoms which clinch the diagnosis. For this reason they are not isolated sufficiently early and by the time the diagnosis is obvious they have probably infected several others. In measles a child may be in an infective condition for a week before the rash appears. In Whooping Cough the onset is often like that of an ordinary cold and it may be more than a week before the characteristic whoop is heard. Yet a child in this stage is infective and may disseminate infection among many others before being isolated. It is thus apparent that the measures necessary to control these epidemics must be taken by the parents and only an intelligent anticipation in face of a threatened epidemic is likely to limit the spread of infection.

Both of these diseases have this in common—that they are much more serious in early life. Teaching, based on these facts, ought to secure the co-operation of parents, and the Child Welfare Centre can and should serve both for the giving of this teaching, and of a warning whenever cases of infectious diseases have occurred.

The following will give some idea of the extent of the work under this head accomplished during the year:—

The number of centres were increased by 19, these being established at the following places:—Dalton (Rotherham R.), Stocksbridge, Ardsley East and West (2), Ardsley (Barnsley), Wales (Kiveton Park), Swinton, Dodworth, Skipton, Cudworth,

Farsley, Garforth, Kirkburton, Sharlston (Wakefield R.), Knottingley, Hebden Bridge, Darfield, Horsforth and Thorne (Thorne R.).

The following Centres are now open in the Administrative County :—Adwick-le-Street (Woodlands), Ardsley (Barnsley), Ardsley East and West, Bentley, Boroughbridge (Great Ouseburn R.), Chapeltown (Wortley R.), Cudworth, Dalton (Rotherham R.), Darfield, Dinnington (Kiveton Park R.), Darton, Dodworth, Ecclesfield (Wortley R.), Farsley, Garforth, Glasshoughton (Pontefract R.), \*Glusburn (Skipton R.), Haworth, Hebden Bridge, Horbury, Horsforth, Hoyland Nether, Kirkburton, Knaresborough, Knottingley, Oulton (Hunslet R.), Pontefract, Queensbury, Rawmarsh, Ripon City, \*Settle (Settle R.), Sharlston (Wakefield R.), Silsden, Skipton, Slaithwaite, Stanley, Stocksbridge, Swinton, Tadcaster (Tadcaster R.), Thorne (Thorne R.), Thurnscoe, Wath-on-Deane, Wetherby (Wetherby R.), Worsborough, Wales (Kiveton Park R.).

Although not yet opened premises have been secured at the following places :—Selby, Royston, Baildon, Penistone, Allerton Bywater (Tadcaster R.), Conisborough.

The number of attendances of mothers and infants at the 46 Centres during the year were 87,764 as compared with 21,659 at 27 Centres in 1919.

### *Breast Feeding of Infants.*

Every Child Welfare Centre should be the means of inculcating and spreading correct ideas on Infant Feeding—of which the first in importance is the immense superiority of Breast Feeding over all other methods of feeding. It should be the aim of every Medical Officer in charge of a Child Welfare Centre to encourage every mother to persevere in the attempt to nurse her baby even where it seems at first most hopeless. It has been demonstrated that even as late as six weeks after the birth of her child a mother may become able to nurse it herself (The Nursling, Pierre Budin). In fact, nothing short of the actual destruction of breast tissue can destroy the power of lactation in a mother. Yet notwithstanding this there are often many difficulties in establishing and maintaining a sufficient supply of breast milk. It is to be feared that many mothers are daunted and discouraged by these difficulties and too readily give up the attempt. The success of a Child Welfare Centre should be measured, not by swollen attendances or gigantic sales of dried milk, but by the percentage of mothers who are nursing their babies. As the centres are used for the distribution of dried milk, and the mothers see considerable activity in this department, there is some danger of their concluding that dried milk is the method of feeding for Infants which has official approval.

The County Medical Officer receives official notification from the midwives of a mother's intention to feed her baby artificially. As the midwife is in attendance for ten days only these notifications give an inadequate idea of the number of mothers who do feed their

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\* Centres marked thus are supported voluntarily.



babies artificially. As a rule the midwives' notifications relate to mothers who have to go out to work—whose inability to nurse their babies is an accepted fact—an inability imposed on them by social conditions. Not a few of them are unmarried mothers whose circumstances compel them to go out to work at the earliest possible date after the birth of a child. (The high infantile mortality among illegitimate children is very well known).

### *Notification of Births Acts.*

During the year 23,566 births were registered and of these 21,607 were notified in the County Notification of Births area.

It will be seen from Table IV. at the end of this report that at Golcar, Knottingley, Marsden and Sowerby Bridge, the births notified were far below those registered, and although I have constantly drawn the attention of doctors and midwives to their obligation under the Acts there is still a large discrepancy, and there appears to be no alternative but to use the full powers of the Acts and prosecute the delinquents—a course which I am loth to take. There is no doubt some doctors refrain from notifying as they dislike the Health Visitor paying a visit to the patient during their ten days' attendance, but there should be no fear on this score as all Health Visitors have instructions that where a medical man is in attendance they must not visit during the lying-in period.

Of the 21,607 births notified in the area administered by the County Council under the Notification of Births Acts, 10,911 were notified by doctors and parents, and 10,696 by midwives.

On the 1st June the County Council, by arrangement with the Horsforth U.D.C., took over their powers under the Acts, but the Ministry of Health have not yet officially transferred the powers to the County Council.

At the end of the year, a Conference was held with the Normanton U.D.C. and they agreed to transfer their powers under the Acts to the County Council, and the arrangement will come into effect on the 1st January, 1921.

During 1920, 13,584 births were registered in the following districts which are the responsible Authorities under the Notification of Births Act, 1907, for the areas concerned. The Urban District of Horsforth is included as all notifications of births are still sent by the persons responsible for notification to the Horsforth Council :—

*Non-County Boroughs* :—Batley, Brighouse, Doncaster. Harrogate, Keighley, Morley, Ossett, Pudsey and Todmorden,

*Urban District Councils* :—Bingley, Bolton-on-Deane, Castleford, Featherstone, Goole, Heckmondwike, Handsworth, Horsforth, Ilkley, Mexborough, Normanton, Rothwell, Shipley, Spenborough and Wombwell.

*Rural District Council* :—Hemsworth.

*Co-ordination with School Medical Service.*

For districts which are their own Authority under the Notification of Births Acts, I give below a short summary of the arrangements made by the County Council in the interests of economy and to avoid overlapping.

*Authorities performing School Nursing for County Council on agreed terms:—*

Bingley, Bolton-on-Dearne, Rothwell and Wombwell.

*Districts where County Council employ a whole-time School Nurse on account of large size of area:—*

Castleford, Featherstone, Goole, Handsworth, Mexborough, Normanton and Hemsworth Rural.

In *Heckmondwike* the work of School Nursing is performed by the local Nursing Association. In *Ilkley* the County Council's Nurse performs Health Visiting for the Ilkley Authority, and School Nursing for the County Council. In *Horsforth* both duties are now carried out by the County Council's Nurse, the Horsforth Council having handed over their powers under the Notification of Births Acts.

The scheme of co-ordinating the Maternity and Child Welfare Service with the School Medical Service was extended as new centres were opened during the year, and there are now 44 Centres where the County Council have established School Clinics

At Bolton-on-Dearne, Ilkley, Normanton and Wombwell, the County Council's School Clinic combines with the Maternity and Child Welfare Centres belonging to the Local Authorities.

In some districts where the local Council were the Notification of Births Authority, the School Medical Inspectors were unable to obtain the child's medical history prior to attending school as no record of the child had been kept after the first year of life. All Authorities in the Administrative County exercising powers under the Notification of Births Acts were circularised and asked to co-operate by keeping a record of the child's health up to five years of age. Promises to carry out our suggestion were received from all of them with the exception of Mexborough who were not favourable on the score of expense. It does seem odd that in the work of a School Medical Inspector a child's life begins at five and ends at 16 years of age.

*Health Visitors.*

During the year 33 Health Visitors and School Nurses and two School Nurses were appointed. In addition two Emergency Nurses were added to the Staff who have kept the work going in districts where the nurse or midwife has been ill or where a nurse has resigned until the vacancy has been filled, and consequently gaps in the work have been few. Resignations and changes in staff numbered 16, and one Health Visitor died. One Health Visitor and School Nurse was also transferred to the Dental Staff.

Health Visitors and School Nurses are appointed at a commencing salary of £150 rising by annual increments of £10 to £180



per annum plus a cost of living bonus which is a variable one, and in 1920 amounted to £41 5s. 0d. per annum. Emergency Nurses receive a commencing salary of £10 per annum more than the Health Visitors. Uniform allowance is £10 and where a bicycle is used £5 per annum.

To prevent overlapping fourteen whole-time Nursing Areas were reduced to workable proportions in order that one nurse could successfully undertake the combined duties of Health Visiting, School Nursing, attendance at Child Welfare Centre, visitation of tuberculosis patients and war orphans on behalf of the Local War Pensions Committee.

At the end of the year the Nursing Staff comprised —

2 Inspectors of Nurses and Midwives.

76 Whole-time Health Visitors and School Nurses.

9 Whole-time School Nurses.

63 Part-time Health Visitors and School Nurses.

In addition there were vacancies for seven Health Visitors and School Nurses.

During the year the work of visitation of tuberculosis patients in areas more than six miles from the nearest Tuberculosis Dispensary was taken away from the Tuberculosis Nurses and transferred to the Health Visitors. Owing to the depleted staff during the War much preliminary work had to be carried out but the scheme was successfully launched and the visitation commenced in several districts.

Since the commencement of this work in February, Health Visitors paid 937 visits.

In December an arrangement was made with the Great Ouseburn Board of Guardians whereby our nurses perform on their behalf the visitation of Boarded-out children under the Children's Act, and the Scheme is working satisfactorily. Conferences took place with several other Boards of Guardians, but no arrangements were made.

#### *Inspectors of Nurses and Midwives.*

During the year an additional lady Inspector of Nurses and Midwives was appointed and there are now two such officers attached to the Central Staff.

The following is a summary of their work during the year :—

Visits paid to	whole-time Nurses	..	..	147
Do.	part-time do.	..	..	70
Do.	Midwives	..	..	275
Special visits in connection with the investigation of cases of Ophthalmia Neonatorum, Puerperal Fever, practice of uncertified persons, concealment of birth, and use of Abortifacients	..	..	..	53
Attendances at Conferences of Nurses	..	..	..	7

Attendances at Conferences with Nursing Association Committees .. ..	33
Conferences with local Councils relative to the Nursing Service .. ..	16
Premises inspected as to their suitability for Child Welfare Centres .. ..	30

In addition to the above the Inspectors made periodical visits to Child Welfare Centres during session; gave addresses to Mothers at Centres; instruction of new nurses; coaching of Midwifery Scholarship Pupils immediately prior to Central Midwives Board examinations and various other duties connected with Maternity and Child Welfare work.

#### *Visits paid by Health Visitors.*

During 1920, 24,174 first visits and 171,576 re-visits were made to children under five years of age; 8,467 pre-natal visits, 4,900 special visits in connection with cases of Ophthalmia Neonatorum, Teething, Circumcision, etc., and 3,994 cases of Measles were visited. (*See Table IV. of Appendix*).

Of the 171,576 re-visits the majority of these are to children under one year of age, but occasional visits are paid to children between the ages of one and five, thus ensuring a continuous record of the child's health up to the time of its admission to school, when the medical history of the child is transferred to the school medical record card.

#### *Measles Visiting.*

During the year 3,994 cases of Measles were visited by the Health Visitors. Immediately this disease was prevalent in a district, the local Medical Officer of Health was offered nursing assistance and the nurse instructed to work under his direction (entirely if necessary) until the epidemic abated.

#### *Milk (Mothers and Children) Order.*

Circular 65 on "Supply of Milk for Expectant and Nursing Mothers and Children under Five" was issued from the Ministry of Health on January 7th, 1920.

The effect of this Order is to allow Local Authorities to supply Milk without the previous consent of the Ministry of Health and to limit the supply of milk (or at less than cost price) to necessitous cases certified as such by the Medical Officer of a Child Welfare Centre or by the Medical Officer of Health.

The County Council's Scheme for the distribution of milk is as follows:—Dried milk only is supplied because of its convenience in handling, its concentration and the greater ease of recovering payments. It is supplied free or at less than cost price for:—

- (a) Children up to three years of age and exceptionally to children between three and five years.
- (b) Nursing Mothers, and
- (c) Expectant mothers during the last three months of pregnancy.



Ordinarily a 1 lb. carton per week (equal to seven pints of fresh milk) is supplied, but where considered necessary three cartons may be supplied per fortnight. It is supplied free or at reduced price in necessitous cases :—

- (a) In districts having a Child Welfare Centre where the Medical Officer of the Centre is of opinion that a supply is essential on the ground of health.
- (b) In districts where there is no Centre when the local Medical Officer of Health is of opinion that a supply is essential on grounds of health or on the production of a special medical certificate.

A Special Sub-Committee has been appointed to deal with applications for dried milk free or at less than cost price, to review circumstances of all people making application, and all authorisations for such supplies.

The Committee determine the degree of "necessity" in each case and have not adopted a fixed scale of income below which dried milk could be distributed free or at less than cost price. But all applicants for milk at less than cost price are required to fill in a form showing the income of the family from all sources.

Recommendations for dried milk free or at less than cost price are valid for one month and may be renewed where the applicant's family circumstances have not improved. Stock books, vouchers, etc., are kept and stock is taken quarterly. Each applicant who receives milk free or at less than cost price signs a receipt which is put in the ledger account to enable a balance to be struck.

#### *Maternity Homes.*

In October, I presented a report on the policy of the County Council in regard to Maternity Homes but the consideration of this was adjourned owing chiefly to the need for economy and also that the erection of new premises was impracticable at the time. However, arrangements have been made with several Local Authorities and Nursing Associations to utilise their existing accommodation and the County Council send patients to the following Maternity Homes at fees varying from £2 2s. 0d. to £3 3s. 0d. per week per patient for each occupied bed together with medical practitioners fee, if necessary :—

Morley and Wakefield Corporations; Bentham, Heckmond-wike, Holmfirth and Settle Nursing Associations.

In connection with the War Memorial at Sowerby Bridge, the Urban District Council have purchased, through voluntary subscriptions, a large house to be utilised as a Maternity Home and Child Welfare Centre. The house stands in its own grounds and was formerly a V.A.D. Hospital, and when the alterations are completed, the Home will serve the whole of the Calder Valley.

Fifty-one County patients entered Maternity Homes during the year. One mother was transferred to hospital owing to an abscess of the breast and three Infants died, the cause being due to prematurity.

**PART IV.**  
Treatment of Tuberculosis.

**TABLE I.**  
Notifications received during 1920 under the Public Health (Tuberculosis) Regulations, 1912.

AGE PERIODS.	Primary Notifications on Form A.											Primary Notifica- tions on Form B.				Form C. (Admissions).		Form D. (Discharges).		
												TOTAL.				Poor Law Institu- tions.	Sanatoria	Poor Law Institu- tions.	Sanatoria	
	0 1	1 5	5 10	10 15	15 20	20 25	25 35	35 45	45 55	55 65	65 and over	0 5	5 10	10 15	TOTAL.	Poor Law Institu- tions.	Sanatoria			
Pulmonary (Males)	9	15	104	78	67	120	199	175	93	46	15	921	—	4	2	6	5	308	—	240
Do. (Females)	3	19	97	95	75	104	189	125	63	21	8	799	—	8	4	12	6	138	2	109
Non-Pulmonary (Males)	13	47	64	34	17	8	8	4	6	4	—	205	—	9	4	13	4	6	1	1
Do. (Females)	4	38	56	48	23	19	14	6	2	3	—	213	—	18	8	26	1	2	—	1



## LIST OF STAFF.

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*Chief Tuberculosis Officer* : John B. McDougall, M.D., M.R.C.P.  
(Ed.), F.R.F.P. and S. (Glas.).

Dispensary Areas.	District Tuberculosis Officers.
Barnsley .. ..	Walter C. Rivers, M.R.C.S., L.R.C.P., D.P.H.
Dewsbury .. ..	Cecil L. Williams, L.R.C.P., M.R.C.S., B.Sc., D.P.H.
Doncaster .. ..	Alex. Leitch, M.B., Ch.B., D.P.H.
Huddersfield ..	John E. Gething, B.A., M.B., Ch.B.
Keighley .. ..	E. Allan Wilson, M.D., B.S., M.R.C.S. L.R.C.P.
Otley .. ..	Gerrard A. Crowley, B.A., M.D., D.P.H.
Pontefract .. ..	Thomas W. Rutledge, M.B., Ch.B., D.P.H.
Rotherham .. ..	John Stevenson, M.B., Ch.B., D.P.H.
Sowerby Bridge ..	George M. B. Liddle, M.B., Ch.B., F.R.C.S. (Ed.), D.T.M., D.P.H.
Wakefield .. ..	Henry Blyth, M.B., Ch.B., D.P.H.
Wadsley Bridge ..	Charles L. Sutherland, M.B., Ch.B., D.P.H.

### Sanatorium Staff—

#### *Institution.*

Middleton .. ..	Thompson Campbell, M.D. John J. Thomson, M.B., Ch.B. * Ethel Griffiths, M.B., B.S., M.R.C.S., L.R.C.P.
Cardigan .. ..	Ernest J. C. Groves, M.B., Ch.B.
Eldwick .. ..	Margaret S. Sharp, M.B., B.S.

\* *Resigned November, 1920.*

The Anti-tuberculosis Scheme of the County Council was formulated in July, 1912, but it was not until 1913 that it assumed a definite shape. A systematic plan of attack was in operation during 1913-14, but the onset of the Great War hindered progress considerably in two directions; firstly, by necessitating a reduction in the clinical and administrative staff, and secondly, by inflicting upon the civilian population the very conditions which lead to an increase in the incidence of the disease. The "influenza" epidemic of 1918, in addition to killing many persons after a short illness, helped to swell the numbers of tuberculous patients. There is very little doubt that the increased mortality rates from phthisis during the war period were due to a combination of these circumstances.

During 1919 several new Officers were appointed to the districts to fill vacancies caused by the War, but it was not until 1920, that the scheme originally outlined by the County Council was in full operation for the first time.

### THE UNITS in the SCHEME.

1. **The Dispensary.**—The Dispensary is a most important unit in the scheme. It should serve as a centre for diagnosis, observation, and special treatment, but, further, it should act as an educational bureau, teaching continually the importance of the laws of hygiene and public health in the **prevention** of the disease. It is to be regretted that the popularity of the Dispensary as a "treatment" centre has interfered greatly with its true function. Treatment should be conducted at the Dispensary only in cases where special methods, *e.g.*, artificial pneumothorax, tuberculin, "brass" applications, etc., are necessary. The indiscriminate dispensing of drugs, cod liver oil and malt is to be discouraged. Attendances at some of the Dispensaries are too frequent, with the result that individual patients must necessarily receive scant attention.

The great increase in the number of tuberculous ex-service men has added largely to the clerical duties of the District Tuberculosis Officers and the task of keeping accurate records of the various forms demanded by the Ministry of Pensions has undoubtedly had a prejudicial effect on the clinical work of the Dispensaries. The Dispensary Areas, with central and branch dispensaries, are enumerated on pages 55-58, and the results of the work accomplished during the year are set out in Tables V. and VI.

2. **The Sanatorium and Hospital.**—At the beginning of 1920, the County Council had 406 beds available for the treatment of patients suffering from pulmonary and non-pulmonary tuberculosis. In December, 1920, there were 480 beds, made up as follows :—



Institution.	Class of Case.	Beds Available.		
		Males.	Females	Children.
Middleton-in-Wharfedale ..	Pulmonary .. (early)	150	50	—
Cardigan .. .. .	Pulmonary .. (acute and chronic progressive cases).	50	—	—
Dean Head .. .. .	Do. .. .. .	28	—	—
Mitchell Memorial Home	Pulmonary (early)	27	—	—
Morton Banks .. .. .	Pulmonary (mixed).	—	49	—
Eldwick .. .. .	Pulmonary .. (early).	—	—	39
Eastby .. .. .	Do. .. .. .	—	—	25
Leasowe .. .. .	Non-Pulmonary	—	—	16
Alton .. .. .	Do. .. .. .	—	—	20
Marguerite Home, Thorp Arch.	Do. .. .. .	—	—	9
Other Institutions ..	Pulmonary (early).	4	4	9
		259	103	118

With a view to opening a new sanatorium for women and children the County Council have inspected many sites during the year. The results of this labour will, it is hoped, be evident during 1921.

The County Medical Officer and the Chief Tuberculosis Officer submitted a report to the Public Health Committee in December showing the minimum requirements of the Riding for institutional treatment of Tuberculosis in all its forms to be 938 beds. The greatest difficulty during the year was to provide hospital treatment for the "open" or advanced cases in females. With the facilities for Sanatorium Treatment so limited it is not surprising that the demand for Hospital beds has been great.

Tables II. and II. (a) show the numbers of cases admitted to and discharged from the various institutions during the year, and Table III. the immediate results of treatment.

**3. Domiciliary Treatment.**—This form of treatment, to which most attention should be given, is the least satisfactory of all. Reports were only rarely received from practitioners during the year, and the increase in Dispensary work has made it difficult for Tuberculosis Officers to devote more time to home visitation. There is evidence, however, that in some instances

the co-operation between the practitioner and the Tuberculosis Officer has been very close; this is particularly so in those areas where the Tuberculosis Officer has been appointed for some time. But Domiciliary Treatment should not be taken up with apathy, and the regulations embodied in the new Public Health (Tuberculosis) Bill, 1921, open up a new chapter; the practical application of Domiciliary Treatment under the administration of the Regional Medical Officer will be watched with interest.

Altogether 5,122 homes have been visited by the Dispensary Nurses during the year. In February, 1920, the visiting of patients in their homes was begun in certain districts by Health Visitors working in conjunction with the Tuberculosis Officer. Before the end of the year the scheme was complete. It has made for completeness on the whole, for the areas at the disposal of the Dispensary Nurses were much too large for thorough and systematic visiting. The total number of visits made by Dispensary Nurses during the year was 17,666; by Health Visitors 937.

Open-air shelters constitute a valuable means of affording isolation in certain cases. The purchase of nineteen new open air sleeping shelters was sanctioned during 1920, bringing the total number at present in use throughout the County up to 100. As a measure for providing additional accommodation in houses already overcrowded, the value of the shelter cannot be overestimated. They are extremely popular with patients, so much so that the supply is not equal to the demand. All shelters are inspected and reported on periodically by the Dispensary and Domiciliary Staff.

469 deaths from tuberculosis were notified during the year by the Tuberculosis Officers, but 1,497 deaths actually occurred in the Administrative County. And since the great majority of deaths occur in patients recommended Domiciliary Treatment it is obvious that there is room for much closer co-operation between the Tuberculosis Department and Practitioners responsible for the supervision of domiciliary cases. It is also certain that many contacts of fatal cases have never been examined. In order to ensure the examination of all contacts the Committee agreed to arrangements being made with Local Registrars of Deaths to forward to the Tuberculosis Department details of all deaths from Tuberculosis.

**4. After Care.**—No comprehensive scheme has yet been adopted by the County Council for the Care and After-Care of tuberculous persons, but that such is necessary is apparent on all sides.

The District Insurance Committee did much locally to help necessitous cases, but beyond the provision of extra nourishment and clothing in special cases, no material assistance could be given. It was thought that the new Tuberculosis Bill would



make further provision for after-care, but the time is apparently not considered opportune in which to embark on any scheme of subsidy for this most important branch of the tuberculosis campaign. The sum of £5,224 was spent by the Insurance Committee in extra nourishment (milk and eggs) to 404 insured persons, and £358 in extra clothing to 198 necessitous cases during 1920.

The County Council has accepted a scheme for training and after-employment of certain patients. It is intended that this scheme should come into operation at Middleton Sanatorium Training Colony, which is being erected at present by the Ministry. Arrangements are made in this scheme for the after-care and employment of men who are considered competent workmen. The scheme, however, is at present in embryo form, and is not expected to materialise until the end of 1921 at least.

In the absence of After-Care Committees it has been the duty of the Central Department to arrange for after-employment in many cases where the conditions under which the patient worked previously were found on investigation to be unsuitable.

On December 31st, 1920, the District Insurance Committees ceased to function, so that there was no local organisation left to deal with the question of after-care of the tuberculous. It cannot be too emphatically stated that without an active and energetic organisation to assist in the care and after-care of tuberculous persons, much of the medical work in connection with the prevention and cure of the disease will be of little avail. The socio-economic factors involved in the study of tuberculosis make it obvious that the purely medical aspect of the disease, however important, is only one side of the problem. Care and After-Care Committees, properly organised and subsidised, would exert a powerful influence in combating many of the conditions which lie outside the provinces of medical workers and yet which are included in the domain of preventive medicine.

#### **Refractories Industries (Silicosis) Scheme.**

962 workers were examined during the year ending March 31st, 1921. viz. :—

Wadsley Bridge Area	..	850
Barnsley	..	18
Huddersfield	..	45
Sowerby Bridge	..	27
Doncaster	..	17
Otley	..	5
		<hr/>
		962
		<hr/>

This disease is due to the small particles of silica irritating the lung substance and leading to thickening of the framework of

the lung, thereby inducing obliteration of the essential tissue itself. The disease may be fatal, but frequently tuberculosis is superadded to the silicosis.

The Refractories Industries (Silicosis) Scheme compensates men who are suspended after medical examination, or who die from the effects of silicosis; but no special provision is made for men who develop tuberculosis without silicosis. The diagnosis of the disease offers great difficulties in early cases particularly.

Dr. Sutherland, of Wadsley Bridge, reports as follows:—  
“The difficulty of obtaining a good X-ray plate in Sheffield has lead to the majority of the cases being brought before the Medical Advisory Committee. It is possible that the difficulty may be overcome in the near future, as the Corporation of Sheffield are obtaining an up-to-date X-ray plant.”

The following certificates were issued during the year:—

Certificate A.	(Silicosis alone)	.. .. .	13
Do. B.	(Silicosis accompanied by Tuberculosis)	..	2
Do. C.	(Re-examination)	.. .. .	36
Do. D.	(Total disablement due to Silicosis alone)		4
Do. E.	(Total disablement due to Silicosis accompanied by Tuberculosis)	.. .. .	2
Do. F.	(Death due to Silicosis)	.. .. .	3
Do. G.	(Death due to Silicosis accompanied by Tuberculosis)	.. .. .	2

Although the exclusion of persons affected with early Silicosis is an important item in the prevention of advanced disease, the real adoption of methods to prevent the silica dust from reaching the lung tissue offers the most certain means of prophylaxis. Four post-mortem examinations were made during the year. In one case there was no evidence on which to grant a certificate, and in a second, a certificate was issued only after a microscopic examination of the diseased lung.

**Lectures and Propaganda.**—It has been a satisfactory feature of the year's work that 15 lectures have been given by Tuberculosis Officers of the Council, and that 71,500 pamphlets have been distributed at different centres in the County. The expense of this form of propaganda was defrayed entirely out of funds supplied by the Insurance Committee.

**Non-Pulmonary Tuberculosis.**—The Council has been fortunate in securing thirty additional beds at Alton, Hampshire, and at Marguerite Home, Thorp Arch, for the treatment of non-pulmonary forms of tuberculosis. Arrangements were also made with the Authorities at Alton for courses of instruction for District Tuberculosis Officers, and in July, 1920, one Officer was allowed to take advantage of this agreement. It is hoped that the Council will allow other members of the staff to undertake such a course of post-graduate study when further temporary vacancies arise at Alton.



The Council has spent £43 during the year on the provision of special appliances for cases of non-pulmonary tuberculosis. At the Barnsley Central Dispensary plaster casings are made and splints adjusted in accordance with the best teaching of surgical tuberculosis. It is hoped that accommodation for adult cases of non-pulmonary tuberculosis will be available at the new institution; the absence of such accommodation is a serious defect in the present scheme. In 1920, there were 418 new cases of non-pulmonary tuberculosis examined at the Dispensaries. This number was made up as follows :—

Glands .. .. .	234
Bones and Joints .. .. .	95
Internal Organs (including Peritonitis)	61
Other cases (including Skin) .. .. .	28
	<hr/>
	418
	<hr/>

In 1919 the number of new cases examined was 326.

**Tuberculous Ex-Service Men.**—There were 820 tuberculous ex-service men added to the Dispensary lists during the year.

The numbers of ex-service men on various forms of treatment at the end of 1920 were :—

Sanatorium .. .. .	126
Domiciliary .. .. .	54
Hospital .. .. .	37
Dispensary .. .. .	1387
	<hr/>
Total .. .. .	1604
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The Chief Tuberculosis Officer attended at weekly intervals as medical adviser in tuberculous cases at the Ministry of Pensions medical boards. All fees for examinations made in respect of ex-service men are recovered by the County Council from the Ministry of Pensions.

**Special Forms of Treatment and Research.**—Tuberculin is being used at several of the Dispensaries in suitable and selected cases, and excellent results have been attributed to Vaccine-Therapy both at the Dispensaries and at the Sanatoria. Evidence as to the value of Artificial Pneumothorax is increasing. This special form of treatment has been carried out at two Dispensaries, at Morton Banks and Middleton Sanatoria. The after-histories of these cases are being followed with interest.

Research work at the Dispensaries is almost impossible on account of the pressure of routine work, but at Middleton Sanatorium some work has been done on the blood of patients suffering from the disease. During the interval May-September, 1920, an intensive investigation was carried out by the entire staff to determine approximately the number of "open" cases, i.e.,

cases with the bacilli in the sputum, in the County. In this work the District Officers gave invaluable assistance. The County Medical Officer and the Chief Tuberculosis Officer have also gone into the question of the incidence of the disease in the County and have reported their findings to the Tuberculosis Sub-Committee. A summary of the conclusions arrived at is given below :—

- (1) That the prevalent type of Phthisis in the West Riding of Yorkshire is the middle-age type.
- (2) That there is a difference in the mortality rate from Pulmonary Tuberculosis in different age groups in different Dispensary Areas in the Riding.
- (3) That the death rates from Pulmonary Tuberculosis and from other respiratory diseases are much higher amongst children under 15 years of age in the Rotherham Dispensary Area than in Western Yorkshire, *i.e.*, in Sowerby Bridge and Huddersfield Dispensary Areas.
- (4) That there is probably a certain amount of immunity to Pulmonary disease amongst adults in the Rotherham Dispensary Area.
- (5) That the factor which decides a high infantile and juvenile mortality rate is apparently atmospheric contamination and that this is most common in mining and industrial centres with a low rain-fall and situated at low altitude.
- (6) That open cases of Phthisis are more numerous in the textile centres where a large percentage of the adult population of both sexes spend most of their time in factories and in houses.
- (7) That Phthisis is more common in Western Yorkshire amongst the adult population, which is probably due to the lack of immunity as well as to the nature of the employment of the majority of the population.
- (8) That a still greater effort should be made to safe-guard the lives of the children, especially in South Yorkshire, where the toll is enormous, and that there is urgent demand for atmospheric purity. Open-air Schools in pure air zones are strongly advocated.
- (9) That factory hygiene, by which is meant the routine medical examination of workers and the full observation of the details of ventilation and of prevention of infection, should be thoroughly enforced.

The results of this enquiry have opened up new paths for investigation, and a still closer co-operation with the School Medical Service than has hitherto prevailed has been effected with the object of elucidating some of the questions raised, with regard to respiratory disease in children in the various areas.

**Co-operation with the School Medical Department.**—In September, 1920, a general instruction was sent to all School Medical Inspectors inviting closer co-operation with the District Tuberculosis Officers. The result of this has been to increase



substantially the number of children attending Dispensaries, and to ensure thereby early and proper treatment. All cases of lung disease and of doubtful cases are sent direct to the Dispensaries by the School Medical Inspectors, and examined and reported on by the District Tuberculosis Officers.

**Dental Treatment.**—Provision is made for dental treatment for children of school age, and for ex-service men, but there are no facilities at present for dental treatment in other classes of patient.

In reviewing the anti-tuberculosis crusade in the West Riding (and elsewhere) since its inception in 1912, under the provisions of the National Insurance Act, one is forced to the general conclusion that preventive medicine has not been accorded its proper share in the fight against the disease.

Education of the public to a sense of “individual responsibility” is just as important as is the Dispensary in diagnosis or the Sanatorium in treatment. This is the view which is also accepted by the Chief Medical Officer to the Ministry of Health in his report for 1919-20. But if the success or failure of any scheme in public health is to be judged by the mortality rate in successive years, then there is every encouragement to go forward against the powerful enemy.

TABLE II.

**Institutional Treatment During 1920.**  
**(A) PULMONARY CASES (Shewing stage of disease on admission).**

INSTITUTION.	ADMISSIONS.									DISCHARGES.								
	CIVILIAN MALES.			EX-SERVICE MEN.			FEMALES.			CIVILIAN MALES.			EX-SERVICE MEN.			FEMALES.		
	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.
Middleton	68	40	1	218	88	2	90	32	1	60	47	3	189	118	10	81	39	3
Cardigan	1	24	23	14	64	28	—	—	—	5	22	15	31	62	21	—	—	—
Mitchell Memorial Home	—	—	—	39	59	1	—	—	—	—	—	—	52	43	—	—	—	—
Dean Head	2	4	26	2	12	32	—	—	—	4	6	25	2	15	30	—	—	—
Morton Banks	—	1	—	—	—	—	9	59	51	—	1	—	—	—	—	16	47	47
Eldwick	15	3	1	—	—	—	27	34	1	12	3	1	—	—	—	31	21	2
Eastby	33	9	—	—	—	—	—	—	—	21	5	1	—	—	—	—	—	—
Miscellaneous	4	7	—	2	3	1	6	1	—	—	1	—	1	—	1	3	1	—
Totals	123	88	51	275	226	64	132	126	53	102	85	45	275	238	62	131	108	52



TABLE II (a).  
Institutional Treatment During 1920.  
(B) NON-PULMONARY CASES.

INSTITUTION.	ADMISSIONS.								DISCHARGES.							
	MALES.				FEMALES.				MALES.				FEMALES.			
	Glands.	Bones and Joints.	Internal Organs.	Other Cases (including Skin).	Glands.	Bones and Joints.	Internal Organs.	Other Cases (including Skin).	Glands.	Bones and Joints.	Internal Organs.	Other Cases (including Skin).	Glands.	Bones and Joints.	Internal Organs.	Other Cases (including Skin).
Leasowe ..	—	1	5	—	1	6	3	1	2	3	3	—	1	5	3	—
Alton ..	—	4	—	—	—	5	—	—	—	2	—	—	—	2	—	—
Marguerite Home ..	3	—	1	—	—	2	4	—	—	—	1	—	1	—	—	—
Totals ..	3	5	6	—	1	13	7	1	2	5	4	—	2	7	3	—

TABLE III.

**Immediate Results of Institutional Treatment during 1920.  
(Pulmonary Cases).**

Classification of Cases treated. (Adults).

SANATORIUM.	Stage of Disease on Admission.			Total of Cases discharged.	Average period of residence per patient.	
	Stage I.	Stage II.	Stage III.		Weeks.	Days.
Middleton .. ..	330	204	16	550	20	2
Cardigan .. ..	36	84	36	156	14	6
Dean Head .. ..	6	21	55	82	20	4
Mitchell Memorial Home .. ..	52	43	—	95	11	6
Morton Banks .. ..	16	48	47	111	25	5
Miscellaneous .. ..	4	2	1	7	8	4
Totals .. ..	444	402	155	1001		

*Of the 444 cases in Stage I. :—*

200	}	had their working capacity fully restored, or
or 45.0%		were discharged "much improved."
101	}	had their working capacity temporarily
or 22.7%		restored, or were discharged "moderately improved."

*Of the 402 Cases in Stage II. :—*

162	}	had their working capacity fully restored, or
or 40.2%		were discharged "much improved."
89	}	had their working capacity temporarily
or 22.1%		restored, or were discharged "moderately improved."

*Of the 155 Cases in Stage III. :—*

45	}	had their working capacity fully restored, or
or 29.0%		were discharged "much improved."
23	}	had their working capacity temporarily
or 14.8%		restored, or were discharged "moderately improved."

The following shews the Classification of the 97 children discharged from the Eldwick and Eastby Sanatoria :—

Stage I.—64; Stage II.—29; Stage III.—4.

*Of the 64 Cases in Stage I. :—*

42	}	had their vigour restored or were discharged
or 65.6%		"much improved."
10	}	had their vigour temporarily restored or were
or 15.6%		discharged "moderately improved."



Of the 29 Cases in Stage II. :—

21 } had their vigour restored or were discharged  
 or 72·4% } “ much improved.”  
 3 } had their vigour temporarily restored or were  
 or 10·3% } discharged “ moderately improved.”  
 The four cases in Stage III. were all discharged much improved.

### Non-Pulmonary Cases.

#### Classification of Cases Treated. (Children).

INSTITUTION.	Parts affected by disease :—			Total of Cases discharged.
	(a) Glands.	(b) Bones and Joints.	(c) Abdominal	
Leasowe .. .. .	3	8	6	17
Alton .. .. .	—	4	—	4
Marguerite Home .. .. .	1	—	1	2
	4	12	7	23

Of the 4 Cases in Class (a). :—

3 } were discharged “ much improved ” and the  
 or 75% } other was “ moderately improved.”

Of the 12 Cases in Class (b). :—

7 } were discharged “ much improved.”  
 or 58·3%

Of the 7 Cases in Class (c). :—

3 } were discharged “ much improved ” and one  
 or 42·8% } or 14·2% was “ moderately improved.”

### TABLE IV.

#### No. of New Applicants for Treatment in 1920.

(Shewing the kind of treatment granted).

	No. of Applicants for treatment.	Treatment Granted.				Cases for which no treatment available.
		Dispen- sary.	Sana- torium.	Hospital	Domi- ciliary.	
Insured Males (in- cluding Ex- Service Men) ..	949	322	502	78	47	—
Insured Females	165	37	86	29	13	—
Uninsured Males (including Ex- Service Men)	355	226	111	13	—	5
Uninsured Females ..	532	278	185	57	—	12
Total	2001	863	884	177	60	17

TABLE V.  
DISPENSARY TREATMENT.  
ANALYSIS OF CASES EXAMINED DURING 1920.

DISPENSARY OR BRANCH.	NEW CASES EXAMINED.						ANALYSIS OF NEW CASES.										CONTACTS EXAMINED.					NO. OF PATIENTS UNDER TREATMENT AT END OF 1920.					
	Tuber- culous.		Suspected Cases.		Non- Tuber- culous.		Pulmo- nary.		Gland.		Osseous.		Abdom.		Other Non-Pul.		At Dispen- sary.	At home	Analysis of Contacts.			At Dispensary.			At Home.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			Tub.	Susp.	Non- Tub.	Civilian Insured.	Civilian Other.	Ex- Service Men.	Civilian Insured.	Civilian Other.	Ex- Service Men.
Barnsley .. ..	218	171	9	7	52	56	204	155	5	8	7	6	2	2	—	—	101	4	37	4	64	87	263	187	3	2	2
Penistone .. ..	5	7	—	—	2	3	5	7	—	—	—	—	—	1	—	—	6	—	2	—	4	5	13	4	—	—	—
Dewsbury .. ..	27	23	15	8	19	12	24	19	2	1	1	1	—	—	—	2	30	—	7	12	11	40	91	40	2	1	—
Pudsey .. ..	13	6	6	2	3	1	12	5	—	—	—	1	—	—	1	—	2	—	1	1	—	30	30	13	1	1	—
Birstall .. ..	9	12	3	3	15	5	11	15	1	—	—	—	—	—	—	—	7	—	1	1	5	19	55	16	—	—	—
Liversedge ..	24	19	5	15	13	6	28	27	—	—	—	—	1	—	—	—	14	—	5	2	7	34	35	25	1	—	1
Morley .. ..	44	36	12	5	8	3	46	38	11	5	2	—	2	1	3	—	27	5	17	10	5	70	118	28	6	—	2
Doncaster .. ..	207	83	9	3	69	22	184	64	9	12	6	4	6	3	2	—	63	—	24	4	35	72	209	130	3	3	3
Goole .. ..	60	39	2	—	5	4	51	34	5	1	—	2	4	2	—	—	18	—	14	—	4	28	78	11	1	—	5
Thorne .. ..	15	13	1	2	—	—	12	12	2	—	1	—	—	—	—	1	3	—	2	1	—	3	24	2	—	—	1
Huddersfield ..	38	34	48	30	11	9	69	49	14	9	3	2	—	4	—	—	39	—	7	15	17	66	139	47	4	4	4
Uppermill .. ..	17	3	10	8	—	—	25	5	2	4	—	1	—	1	—	—	12	—	—	12	—	13	86	11	1	1	—
Marsden .. ..	14	4	15	21	—	—	23	21	4	4	1	—	—	—	1	—	6	—	—	6	—	18	80	9	—	—	2
Holmfirth .. ..	16	5	9	16	3	4	18	11	7	7	—	1	—	1	—	1	9	—	1	3	5	22	60	4	—	1	—
Keighley .. ..	54	35	3	1	40	20	40	27	5	5	4	2	4	1	1	—	14	2	9	1	16	81	39	58	7	—	5
Skipton .. ..	29	8	2	—	23	7	25	5	2	1	1	2	1	—	—	—	10	2	4	1	7	8	13	16	2	—	6
Barnoldswick ..	18	15	3	—	30	15	18	13	—	1	—	1	—	—	—	—	9	1	3	1	6	21	25	20	1	—	2
Otley .. ..	14	7	1	—	22	19	9	6	1	1	—	—	4	—	—	—	30	—	1	—	29	16	13	10	—	—	—
Guiseley .. ..	13	9	—	—	14	10	13	8	—	—	—	1	—	—	—	—	20	—	2	—	18	22	17	12	—	—	—
Harrogate .. ..	45	27	1	2	58	43	36	11	6	14	3	1	—	—	—	1	41	—	6	—	35	59	76	41	2	—	2
Shipley .. ..	37	18	2	—	24	18	24	10	8	7	2	—	1	—	2	1	52	—	6	2	44	41	34	30	1	—	—
Pontefract .. ..	190	82	70	23	37	17	182	68	3	13	4	—	—	1	—	—	81	3	53	30	11	73	185	186	10	1	14
Tadcaster .. ..	13	7	5	1	1	1	10	6	—	—	2	1	1	—	—	—	3	1	4	—	—	1	17	20	—	—	—
Normanton .. ..	59	44	9	12	8	11	58	22	1	1	—	1	—	—	—	—	15	1	8	3	5	32	125	62	1	—	1
Selby .. ..	24	4	2	1	3	—	23	4	—	—	—	—	—	—	1	—	10	1	4	3	4	9	32	28	—	—	—
Rotherham .. ..	84	52	10	16	24	26	72	42	6	8	1	—	5	2	—	—	45	—	21	10	14	2	84	34	1	3	—
Mexborough ..	108	71	29	18	33	31	100	52	3	8	2	5	2	2	1	4	34	—	17	6	11	28	96	52	—	4	2
Sowerby Bridge ..	34	25	6	1	14	10	24	22	2	3	5	—	2	—	1	—	31	—	2	7	22	46	139	26	4	3	1
Todmorden .. ..	16	13	3	1	3	1	15	13	1	—	—	—	—	—	—	—	3	—	—	—	3	66	83	16	1	2	—
Brighouse .. ..	20	13	6	1	1	1	18	9	1	1	—	1	—	1	1	1	9	—	6	—	3	39	69	15	—	—	—
Wakefield .. ..	94	46	9	6	61	51	88	41	4	4	2	1	—	—	—	—	51	10	10	11	40	61	129	59	1	1	—
Hemsworth .. ..	49	37	6	8	36	30	45	29	2	3	1	3	1	2	—	—	24	12	12	8	16	26	115	33	2	—	3
South Kirkby ..	40	26	1	3	21	41	33	21	3	1	3	4	1	—	—	—	37	6	16	10	17	20	124	41	1	—	—
Wadsley Bridge ..	22	15	—	2	14	9	33	22	1	1	1	2	—	—	1	1	11	12	5	—	17	38	51	16	2	1	1
Totals .. ..	1670	1009	312	216	667	486	1578	893	111	123	52	43	37	24	16	12	867	60	307	164	475	1216	2647	1302	58	28	57



TABLE VI.

## Results of Dispensary Treatment and Domiciliary Treatment, 1920.

DISPENSARY OR BRANCH.	DISPENSARY TREATMENT.					DOMICILIARY TREATMENT.				
	No. Treated.	Improved.	No Change.	Worse.	Dead.	No. Treated.	Improved.	No Change.	Worse.	Dead.
<b>Barnsley</b> ..	382	203	113	55	11	7	2	1	3	1
Penistone ..	12	7	3	2	—	—	—	—	—	—
<b>Dewsbury</b> ..	171	112	37	16	6	9	1	1	1	6
Pudsey ..	62	36	18	7	1	2	—	1	1	—
Birstall ..	74	42	17	10	5	1	—	—	—	1
Liversedge ..	83	55	8	11	9	4	1	—	—	3
Morley ..	194	108	62	16	8	12	2	2	4	4
<b>Doncaster</b> ..	462	256	137	60	9	35	4	7	2	22
Goole ..	120	70	38	9	3	16	4	3	2	7
Thorne ..	31	10	19	2	—	2	—	—	1	1
<b>Huddersfield</b> ..	349	193	148	7	1	30	3	1	7	19
Uppermill ..	146	82	62	2	—	4	—	1	1	2
Marsden ..	128	80	44	3	1	3	—	—	2	1
Holmfirth ..	104	58	38	8	—	6	—	—	1	5
<b>Keighley</b> ..	213	157	43	10	3	31	5	4	5	17
Skipton ..	59	48	9	1	1	7	2	1	3	1
Barnoldswick ..	87	65	17	5	—	9	1	—	2	6
<b>Otley</b> ..	76	58	8	4	6	—	—	—	—	—
Guiseley ..	72	50	9	5	8	—	—	—	—	—
Harrogate ..	284	208	40	19	17	4	—	4	—	—
Shipley ..	192	124	32	23	13	—	—	—	—	—
<b>Pontefract</b> ..	532	259	177	90	6	66	6	7	12	41
Tadcaster ..	38	23	9	6	—	3	1	—	—	2
Normanton ..	239	147	53	35	4	8	—	1	1	6
Selby ..	76	49	21	3	3	3	—	—	—	3
<b>Rotherham</b> ..	260	115	100	30	15	8	3	1	—	4
Mexborough ..	298	147	106	31	14	14	2	1	3	8
<b>Sowerby Bridge</b> ..	238	34	165	21	18	21	5	3	1	12
Todmorden ..	149	27	109	7	6	7	1	1	1	4
Brighouse ..	140	20	110	4	6	4	—	—	—	4
<b>Wakefield</b> ..	252	136	89	24	3	14	—	1	1	12
Hemsworth ..	180	106	61	7	6	10	3	1	1	5
South Kirkby ..	197	137	39	9	12	5	—	1	—	4
<b>Wadsley Bridge</b> ..	108	53	40	10	5	9	1	1	2	5
Totals ..	6008	3275	1981	552	200	354	47	44	57	206

### Dispensary Areas.

**BARNSELEY.** District Tuberculosis Officer :—Walter C. Rivers, M.R.C.S., L.R.C.P., D.P.H.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> Open-Air School, Queen's Road, Barnsley. (Non-Resident).	7-2-14	<i>Urban :—</i> Ardsley, Cudworth, Darfield, Darton, Dodworth, Gunthwaite and Ingbirchworth, Hoyland Nether, Hoylandswaine, Monk Bretton, Penistone, Royston, Thurlstone, Wombwell, and Worsborough.  <i>Rural :—</i> Barnsley, Penistone, and Wortley (part of).
<b>Branch :—</b> 17, Market Street, Penistone ..	12-3-14	

**DEWSBURY.** District Tuberculosis Officer :—Cecil L. Williams, L.R.C.P., M.R.C.S., D.P.H.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> Northfield House, Halifax Road Dewsbury. (Resident).	28-6-13	<i>Urban :—</i> Batley Borough, Birkenshaw, Birstall, Calverley, Drighlington, Farsley, Gilder- some, Heckmondwike, Hunsworth, Morley Borough, Pudsey Borough, and Spen- borough.
<b>Branch :—</b> Town Hall, Manor House Street, Pudsey.	21-6-13	
<b>Branch :—</b> Cyclists' Rest, Millbridge, Liversedge.	17-9-15	
<b>Branch :—</b> Council Offices, Birstall. ..	25-10-14	
<b>Branch :—</b> Union Bank Chambers, Queen Street, Morley	21-6-13	

**DONCASTER.** District Tuberculosis Officer :—Alexander Leitch, M.B., Ch.B., D.P.H.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> Merton House, 20, Christchurch Road, Doncaster. (Resident).	2-10-13	<i>Urban :—</i> Adwick-le-Street, Bentley-with-Arksey, Conisborough, Doncaster Borough, Goole, and Tickhill.  <i>Rural :—</i> Doncaster, Goole and Thorne.
<b>Branch :—</b> 7, Belgravia, Goole ..	20-1-14	
<b>Branch :—</b> 21, Ellison Street, Thorne ..	13-2-14	



**HUDDERSFIELD.** District Tuberculosis Officer :—John E. Gething, M.B., Ch.B., B.A.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> 18, Ramsden Street, Huddersfield. (Resident).	21-6-13	<i>Urban :—</i> Clayton West, Denby and Cumberworth, Farnley Tyas, Golcar, Holme, Holmfirth, Honley, Kirkburton, Kirkheaton, Lepton, Linthwaite, Marsden, Meltham, Mirfield, New Mill, Saddleworth, Shelley, Shepley, Skelmanthorpe, Slaithwaite, South Crossland, Springhead, Thurstonland, and Whitley Upper.
<b>Branch :—</b> Court Street, Uppermill ..	29-8-13	
<b>Branch :—</b> 98, Huddersfield Rd., Holmfirth ..	28-8-13	
<b>Branch :—</b> Over Russell's Shop, Marsden ..	30-10-13	

**KEIGHLEY.** District Tuberculosis Officer :—E. Allan Wilson, M.D., M.R.C.S., L.R.C.P.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> 143, Skipton Road, Keighley .. (Resident).	26-4-13	<i>Urban :—</i> Barnoldswick, Clayton, Denholme, Earby, Haworth, Keighley Borough, Oakworth, Oxenhope, Queensbury, Silsden, and Skipton. <i>Rural :—</i> Bowland, Keighley, Sedbergh, Settle, and Skipton.
<b>Branch :—</b> Friendly Societies' Hall, Sheep St., Skipton ..	5-9-13	
<b>Branch :—</b> 2, Manchester Road, Barnoldswick	9-9-13	

**OTLEY.** District Tuberculosis Officer :—Gerrard A. Crowley, M.D., D.P.H., B.A.

Situation.	Date of Opening.	Sanitary Districts included.
<b>Centre :—</b> Whiteley Croft, off Station Road, Otley. (Resident).	6-2-14	<i>Urban :—</i> Baildon, Bingley, Burley-in-Wharfedale, Guiseley, Harrogate Borough, Horsforth, Ilkley, Knaresborough, Otley, Rawdon, Ripon City, Shipley, and Yeadon. <i>Rural :—</i> Great Ouseburn, Knaresborough, Pateley Bridge, Ripon, Wetherby, and Wharfedale.
<b>Branch :—</b> 1a, Kirkgate, Shipley ..	9-12-13	
<b>Branch :—</b> Kidson's Auction Rooms, Station Bridge, Harrogate ..	2-2-14	
<b>Branch :—</b> Urban Council Offices, Guiseley	15-9-14	

## APPENDIX.

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### Public Health Legislation during 1920.

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Food Control—Local Authorities—Milk (Mothers and Children) Order, 1919. Circular No. 65, Ministry of Health, dated 7th January.

Housing of the Working Classes—County Councils (Assisted Schemes for the Housing of Employees) Regulations, 1920.

Housing of the Working Classes—Grants to Private Persons—Memorandum of the Ministry of Health dated May, 1920.

Housing of the Working Classes—Housing Accounts Order (Local Authorities), 1920.

Circular 42—Local Authorities (outside Metropolis)—Ministry of Health, dated 31st March, 1920. Notes on Special Points—Ministry of Health, March, 1920.

Housing of the Working Classes—Housing Acts (Form of Orders and Notices) Order, 1919.

Housing of the Working Classes—Housing (Loans by County Councils) Order, 1920.

Housing of the Working Classes—Housing (Local Bonds) Regulations, 1920.

Housing of the Working Classes—Prohibition of Demolition (Appeal Procedure) Rules, 1920.

Housing of the Working Classes—Public Utility Societies (Sale of Houses) Regulations, 1920.

Infectious Diseases, Notification of—Weekly Return, Circular No. 518, Ministry of Health, dated 30th June, 1920.

Public Health—Sanitary Inspectors and Inspectors of Nuisances—Circular 84—Local Sanitary and Port Sanitary Authorities—Ministry of Health, dated 23rd April, 1920.

Public Health—Theatres, Music Halls, etc., Sanitary Condition of—Circular 120—Ministry of Health, dated 25th August, 1920.

Public Health—The Use of Milk, and Regulations as to Graded Milk—Circular 121—Local Authorities—Ministry of Health, dated 20th October, 1920.



## No. I. Births, Deaths, Annual Rates, etc., 1920.

SANITARY DISTRICT	AREA (Acres).	ESTIMATED POPULATION 1920.	BIRTHS (Nett).	NETT DEATHS at ALL AGES.	Annual Rates per thousand of Estimated Population.					Rate of Infant Mortality. (Deaths under 1 year per 1000 Births).
					Birth Rate.	Nett Death Rate.	Zymotic Death Rate.	Phthisis Death Rate.	Respiratory Death Rate.	
1	2	3	4	5	6	7	8	9	10	11
I. URBAN.										
Adwick-le-Street .. .. .	3605	11797	365	86	31.0	7.3	0.8	0.4	1.8	66
Altofts .. .. .	1838	5125	122	42	23.8	8.2	0.8	0.4	1.9	90
Ardley .. .. .	1335	7046	238	87	33.8	12.3	1.3	0.7	2.0	105
Ardley, East and West .. .. .	4017	8362	204	111	24.4	13.3	1.4	0.7	1.8	127
Baildon .. .. .	2606	6527	134	89	20.5	13.6	—	0.3	1.8	45
Barkisland .. .. .	2121	1573	30	18	19.1	11.4	—	1.9	0.6	77
Barnoldswick .. .. .	2130	12412	255	134	20.5	10.8	0.24	0.7	1.7	90
Batley Borough .. .. .	3227	36527	888	484	24.3	13.3	0.8	0.7	2.0	83
Bentley-with-Arksey .. .. .	5128	13043	444	133	34.0	10.2	1.2	0.8	2.4	90
Bingley .. .. .	11675	18532	395	262	21.3	14.1	0.3	0.9	2.3	86
Birkenshaw .. .. .	924	2781	64	36	23.0	12.9	1.4	—	3.9	78
Birstal .. .. .	1234	7086	169	89	23.8	12.6	0.4	0.4	2.1	106
Bolton-on-Dearne .. .. .	2325	11957	421	158	35.2	13.2	3.8	0.7	2.3	109
Brighouse Borough .. .. .	2231	20871	421	268	20.2	12.8	0.6	1.1	2.5	71
Burley-in-Wharfedale .. .. .	3136	3808	66	40	17.3	10.5	0.5	0.8	0.8	91
Calverley .. .. .	2106	3423	58	39	16.9	11.4	0.6	—	0.9	52
Castleford .. .. .	564	24183	757	310	31.3	12.8	1.7	0.8	2.8	127
Clayton .. .. .	1462	5040	85	61	16.9	12.1	0.6	0.6	1.4	71
Clayton West .. .. .	1142	1976	40	18	20.2	9.1	0.5	—	1.5	100
Cudworth .. .. .	1746	7479	292	83	19.5	11.1	2.0	0.3	2.1	92
Darfield .. .. .	2018	5744	170	66	29.6	11.5	1.2	0.9	2.6	106
Darton .. .. .	4361	11326	370	153	32.7	13.5	0.9	0.3	2.7	103
Denby and Cumberworth .. .. .	4302	3690	67	33	18.2	8.9	0.3	—	1.1	75
Denholme .. .. .	2536	2938	58	41	19.7	14.0	—	0.7	2.0	86
Dodworth .. .. .	1917	3337	114	42	34.2	12.6	3.0	0.6	3.0	114
Doncaster Borough .. .. .	4831	53647	1427	663	26.6	12.4	0.5	0.8	2.4	100
Drighlington .. .. .	1135	4196	80	59	19.1	14.1	0.2	1.2	3.1	75
Earby .. .. .	3519	5898	156	78	26.4	13.2	0.3	1.0	2.2	64
Elland .. .. .	1994	10675	203	165	19.0	15.5	0.4	1.2	3.7	123
Emley .. .. .	3556	1664	49	25	29.4	15.0	0.6	—	2.4	82
Farnley Tyas .. .. .	1784	489	11	5	22.5	10.2	—	—	2.0	—
Farsley .. .. .	821	6160	117	83	19.0	13.5	0.8	1.0	2.3	68
Featherstone .. .. .	4431	15052	490	254	32.6	16.9	1.6	0.7	5.0	133
Flockton .. .. .	1108	1385	27	9	19.5	6.5	—	0.7	0.7	37
Garforth .. .. .	1519	3927	86	48	21.9	12.2	1.3	0.5	2.8	93
Gildersome .. .. .	992	2990	54	37	18.1	12.4	1.3	0.3	2.3	93
Golear .. .. .	1593	10454	213	135	20.4	12.9	0.7	0.9	1.5	75
Goole .. .. .	1267	18546	624	276	33.6	14.9	1.4	1.3	1.6	77
Greasbrough .. .. .	2413	3229	79	36	24.5	11.1	1.2	—	1.5	127
Greetland .. .. .	626	4570	65	51	14.2	11.2	0.9	0.2	2.0	15
Guiseley .. .. .	1555	5364	117	50	21.8	9.3	0.4	0.6	1.5	68
Gunthwaite-with-Ingberthworth .. .. .	2057	333	11	3	33.0	9.0	—	—	—	182
Handsworth .. .. .	3566	15889	465	199	29.3	12.5	0.7	0.4	2.8	99
Harrogate Borough .. .. .	3277	37674	619	422	16.4	11.2	0.1	0.6	1.6	58
Haworth .. .. .	2337	6635	114	104	17.2	15.7	0.3	1.4	2.0	96
Hebden Bridge .. .. .	476	6459	112	91	17.3	14.1	—	1.1	1.4	71
Heckmondwike .. .. .	696	9191	203	147	22.1	16.0	0.1	1.2	2.7	108
Hipperholme .. .. .	1196	4661	92	50	19.7	10.7	—	1.1	1.5	44
Holme .. .. .	3464	346	7	6	20.2	17.3	—	—	0.9	—
Holmfirth .. .. .	8468	10502	216	146	20.6	13.9	0.9	0.5	1.9	93
Honley .. .. .	1915	4700	76	74	16.2	15.7	0.4	0.9	1.7	118
Horbury .. .. .	1280	7917	195	98	24.6	12.4	0.6	0.3	1.5	67
Horsforth .. .. .	2800	9312	170	101	18.3	10.8	0.3	0.2	1.5	100
Hoyland Nether .. .. .	2087	15181	456	197	30.0	13.0	2.5	0.5	1.8	96
Hoylandswaine .. .. .	2026	678	15	8	22.1	11.8	—	1.5	—	—
Hunsworth .. .. .	1381	1323	24	22	18.1	16.6	—	—	3.8	83
Ilkley .. .. .	3816	9105	151	91	16.6	10.0	0.1	0.2	1.1	46
Keighley Borough .. .. .	3902	40642	800	628	19.7	15.4	0.5	1.0	3.1	84
Kirkburton .. .. .	1289	3284	78	46	23.8	14.0	1.8	0.3	1.8	51
Kirkheaton .. .. .	1674	2678	60	37	22.4	13.8	0.4	1.1	2.2	83
Knaresborough .. .. .	609	5518	123	57	22.3	10.3	0.2	1.0	1.8	65
Knottingley .. .. .	1484	6661	232	117	34.8	17.6	3.3	1.7	2.3	95
Lepton .. .. .	1862	3134	55	47	17.5	15.0	0.6	1.0	4.5	54
Linthwaite .. .. .	1323	9780	220	139	22.5	14.2	0.5	1.1	2.9	91
Luddendenfoot .. .. .	765	2857	55	42	19.2	14.7	—	2.1	3.2	18
Marsden .. .. .	8633	6125	124	80	20.2	13.1	1.0	1.0	2.1	73
Meltham .. .. .	5134	4973	92	66	18.5	13.3	0.2	0.6	2.4	54
Methley .. .. .	3493	4460	137	50	30.7	11.2	0.4	0.7	2.7	95
Mexborough .. .. .	1292	15443	472	197	30.6	12.8	1.0	0.7	2.3	106
Midgley .. .. .	2183	1882	32	28	17.0	14.9	—	0.5	1.6	22
Mirfield .. .. .	3394	12105	268	141	22.1	11.7	0.6	0.2	2.6	78
Monk Bretton .. .. .	214									





SANITARY DISTRICT.	DEATHS FROM SUBJOINED CAUSES.																														
	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	Phthisis (Pul. Tub.).	Tuberculous Meningitis.	Other Tuberculous Diseases.	Cancer-Malignant Disease.	Rheumatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis.	Pneumonia (All Forms).	Other Respiratory Diseases.	Diarrhoea, etc., under 2 years.	Appendicitis and Typhitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis, and Bright's Disease.	Puerperal Fever.	Parturition, apart from Puerperal Fever.	Congenital Debility, etc.	Violence, apart from Suicide.	Suicide.	Other Defined Diseases.	Causes ill-defined or unknown.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
I. URBAN.																															
Adwick-le-Street ..	—	—	1	1	1	3	1	—	5	—	1	6	1	—	10	4	16	1	3	2	—	—	1	1	3	5	2	1	17	—	
Altofts ..	—	—	1	1	—	—	—	—	5	3	—	3	—	1	3	3	7	—	—	—	—	—	—	—	—	3	3	1	11	—	
Ardley ..	—	—	2	—	2	1	—	1	5	2	2	7	—	—	6	6	7	1	4	—	—	—	—	—	10	5	1	21	1	—	
Ardley, East and West ..	—	—	5	—	2	1	4	1	6	1	2	10	1	—	8	9	3	3	4	—	—	—	—	—	7	1	1	41	—	—	
Baildon ..	—	—	—	—	—	—	—	—	3	—	—	13	—	—	12	4	8	—	—	—	—	—	—	—	3	1	2	36	1	—	
Barkisland ..	—	—	—	—	—	—	—	—	2	—	—	2	—	—	3	—	1	—	—	—	—	—	—	—	—	—	—	7	—	—	
Barnoldswick ..	1	—	2	—	—	—	5	—	9	2	3	14	—	2	22	11	10	—	—	—	—	2	5	1	3	6	3	1	30	1	—
Batley Borough ..	2	—	9	1	3	4	7	—	25	2	4	56	3	4	41	44	22	8	11	2	2	17	2	3	38	9	4	163	—	—	
Bentley-with-Arksey ..	2	—	1	—	5	2	1	—	10	1	—	10	—	—	11	13	15	3	5	—	—	—	—	3	11	10	—	26	2	—	
Bingley ..	—	—	2	2	—	1	6	—	16	2	4	27	—	3	44	20	14	9	1	3	—	—	—	3	17	6	—	76	2	—	
Birkenshaw ..	—	—	3	—	—	—	1	—	—	1	—	6	—	—	4	4	5	2	1	—	—	—	—	—	—	—	—	8	—	—	
Birstal ..	1	—	—	—	1	1	1	1	3	2	—	6	1	1	4	7	6	2	—	—	—	—	—	—	11	1	2	36	—	—	
Bolton-on-Deane ..	—	—	38	1	2	1	—	—	8	1	4	9	—	1	7	16	10	2	4	2	—	—	2	—	19	3	1	27	—	—	
Brighouse Borough ..	—	—	7	1	—	3	4	—	22	4	2	29	2	2	31	26	22	5	1	1	—	—	4	1	—	7	2	2	84	1	—
Burley-in-Wharfedale ..	—	—	—	—	—	1	1	—	3	1	—	1	—	—	5	1	2	—	—	—	—	—	—	—	3	2	1	13	—	—	
Calverley ..	—	—	—	1	1	—	2	—	—	—	3	5	—	—	8	2	1	—	—	—	—	—	—	—	—	1	2	1	12	—	—
Castleford ..	—	—	11	—	—	4	3	—	20	2	6	15	1	2	18	38	28	1	27	—	—	—	8	—	3	30	9	—	84	—	—
Clayton ..	1	—	—	1	—	—	—	1	3	—	—	11	—	1	9	5	1	1	—	—	—	—	2	—	—	3	2	1	19	—	—
Clayton West ..	—	—	—	—	—	1	—	—	—	—	—	—	—	—	2	2	1	—	—	—	—	—	—	—	1	2	1	8	—	—	
Cudworth ..	—	—	7	1	—	—	8	—	2	—	—	7	—	2	5	7	6	2	7	—	—	1	—	—	1	7	3	—	16	—	—
Darfield ..	—	—	1	—	—	2	1	1	5	1	—	6	2	—	2	6	8	1	4	—	—	—	1	—	—	5	2	—	16	—	—
Darton ..	—	—	4	—	3	—	7	—	9	—	—	11	2	5	17	13	15	3	3	—	—	—	2	1	—	9	6	1	42	—	—
Denby-with-Cumberworth ..	—	—	—	—	—	—	—	—	—	—	—	3	—	—	3	—	3	1	1	—	—	1	—	—	—	4	1	—	15	—	—
Denholme ..	—	—	—	—	—	—	—	—	2	—	1	1	—	—	6	5	1	—	—	—	—	—	—	—	—	1	—	—	20	—	—
Dodworth ..	—	—	8	—	—	—	—	—	2	—	1	—	—	1	1	7	3	—	2	—	—	—	3	1	—	2	1	—	14	—	—
Doncaster Borough ..	—	—	—	1	8	3	7	—	43	6	15	78	6	4	73	67	57	7	16	—	—	10	1	4	46	17	8	182	2	—	—
Drighlington ..	—	—	—	—	—	1	—	—	5	—	—	4	—	—	9	8	4	1	1	—	—	—	6	2	—	8	2	1	18	—	—
Earby ..	—	—	—	—	2	—	—	—	6	—	2	6	—	—	14	5	8	—	—	—	—	—	3	—	—	8	2	—	15	—	—
Elland ..	—	—	—	—	2	1	11	—	13	—	1	11	—	1	19	18	20	1	1	2	—	—	9	—	—	7	2	—	45	—	—
Emley ..	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	2	2	—	—	—	—	—	2	1	—	2	1	—	1	—	—
Farnley Tyas ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Farsley ..	1	—	1	1	1	—	4	—	6	—	1	4	2	—	9	10	3	1	1	—	—	—	3	—	1	4	—				







## No. III. Notified Cases of Infectious Disease, 1920.

SANITARY DISTRICT.	CASES NOTIFIED OR OTHERWISE ASCERTAINED.																		CASES REMOVED TO HOSPITAL.					MEDICAL OFFICER OF HEALTH.			
	Small-pox.	Cholera. Plague.	Diphtheria and Mem. Croup.	Erysipelas.	FEVERS								Malaria (chiefly contracted abroad).	Pneumonia—Acute and Lobular.	Encephalitis Lethargica.	Polio-myelitis.	Ophthalmia. Neonatorum.	Pulmonary Tuberculosis.	Other Forms of Tuberculosis.	Measles.	Small-pox.	Diphtheria.	Scarlet Fever.			Enteric Fever.	Other.
					Scarlet.	Typhus.	Enteric.	Relapsing. Continued.	Puerperal.	Malaria (chiefly contracted abroad).	Pneumonia—Acute and Lobular.	Encephalitis Lethargica.															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
I. URBAN.																											
Adwick-le-Street ..	..	..	89	..	58	..	1	..	2	..	21	..	..	19	12	3	..	..	84	54	1	1	A. B. Dunne.				
Altofts ..	..	..	2	5	27	..	..	..	1	..	27	..	..	1	9	8	..	..	2	25	..	..	H. Scholefield.				
Ardley ..	..	..	22	4	16	..	1	..	..	..	..	..	..	..	1	1	..	..	22	16	1	..	R. L. Chapple.				
Ardley, East & West ..	..	..	8	3	50	..	..	..	..	..	3	..	..	2	25	1	..	..	7	50	1	..	B. G. Ewing.				
Baildon ..	..	..	3	2	26	..	..	..	..	..	..	..	..	..	..	..	..	..	3	24	..	..	E. G. Firth.				
Barkisland ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	J. Hoyle.				
Barnoldswick ..	..	..	5	..	30	..	1	..	..	..	17	..	..	..	..	..	..	..	..	29	..	..	..	H. C. Alderton.			
Batley Boro' ..	..	..	52	4	55	..	3	..	2	1	34	..	..	13	53	11	..	..	45	49	2	17	G. H. Pearce.				
Bentley-with-Arksey ..	..	..	18	4	26	..	5	..	..	3	24	..	..	1	15	3	..	..	15	22	4	..	A. B. Dunne.				
Bingley ..	..	..	82	8	28	..	2	..	1	9	5	..	..	6	39	14	..	..	76	20	1	2	H. Angus.				
Birkenshaw ..	..	..	1	2	10	..	1	..	..	..	3	..	..	..	3	3	..	..	1	8	1	..	J. Barclay.				
Birstal ..	..	..	6	4	12	..	2	..	..	..	5	..	..	..	12	..	..	..	6	11	2	..	A. Dick.				
Bolton-on-Dearne ..	..	..	12	7	79	..	..	..	1	..	3	1	1	1	23	14	..	..	11	68	..	..	T. Crowley, pro tem				
Brighouse Boro' ..	..	..	13	13	27	..	..	..	2	..	14	..	..	..	27	8	..	..	8	25	..	11	F. W. Martin.				
Burley-in-Wharfedale ..	..	..	6	3	7	..	..	..	..	2	3	..	..	..	..	..	..	..	6	7	..	..	H. Hebblethwaite				
Calverley ..	..	..	2	..	22	..	..	..	..	..	1	..	..	..	1	..	..	..	1	21	..	1	N. Hughes.				
Castleford ..	..	..	39	4	78	..	..	..	1	4	2	1	..	3	35	9	..	..	32	76	..	..	W. Kemp.				
Clayton ..	..	..	5	1	24	..	1	..	1	..	..	..	..	1	5	..	..	..	4	11	..	..	H. Stansfield.				
Clayton West ..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	R. N. Farrer.				
Cudworth ..	..	..	1	7	35	..	1	..	..	..	9	..	..	4	16	2	191	..	1	34	1	..	J. L. Elliott.				
Darfield ..	..	..	9	12	27	..	1	..	1	1	40	..	1	1	16	7	..	..	7	27	..	..	R. F. Castle.				
Darton ..	..	..	1	10	50	..	1	..	2	1	4	1	..	1	31	2	..	..	..	28	..	..	..	R. Millar.			
Denby & Cumberworth ..	..	..	11	..	2	..	1	..	..	..	..	..	..	2	1	..	..	..	11	2	1	..	R. R. Archibald.				
Denholme ..	..	..	1	3	23	..	..	..	..	..	12	..	..	..	3	..	..	..	..	..	..	..	..	A. E. Tunstall.			
Dodworth ..	..	..	3	..	5	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	A. E. White.			
Doncaster Boro' ..	..	..	20	37	76	..	2	..	..	3	49	1	..	8	57	13	12	..	18	53	2	3	D. L. Anderson.				
Drighlington ..	..	..	4	4	6	..	..	..	2	..	5	..	..	2	8	4	..	..	4	4	..	..	..	A. H. B. Fletcher.			
Earby ..	..	..	5	2	4	..	..	..	..	..	13	..	..	..	11	..	..	..	..	3	..	..	..	A. Falconer.			
Elland ..	..	..	13	12	37	..	2	..	..	6	28	..	..	3	14	5	..	..	1	2	..	..	..	R. N. Denning.			
Emley ..	..	..	1	2	1	..	2	..	2	..	..	..	..	1	..	..	..	..	..	..	1	..	..	J. A. Smith.			
Farnley Tyas ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	F. S. B. Fletcher.			
Farsley ..	..	..	2	2	30	..	4	..	..	..	..	..	..	..	5	..	..	..	2	30	4	..	..	J. R. Lambert.			
Featherstone ..	..	..	14	7	31	..	5	..	..	..	..	..	..	4	24	11	491	..	14	31	1	..	..	W. Steven.			
Flockton ..	..	..	7	2	2	..	1	..	..	..	..	..	..	..	2	..	..	..	3	..	..	..	..	J. A. Smith.			
Garforth ..	..	..	2	..	12	..	..	..	..	1	..	..	..	..	3	..	..	..	..	12	..	..	..	E. P. Pickersgill.			
Gildersome ..	..	..	25	1	7	..	..	..	..	..	11	..	..	1	2	..	..	..	21	5	..	..	..	W. H. Holliday.			
Goole ..	..	..	28	6	34	..	..	..	2	1	12	..	..	1	6	1	..	..	21	30	..	..	..	A. G. Webster.			
Goole ..	..	..	69	12	55	..	..	..	2	9	43	..	..	3	40	5	..	..	63	44	..	1	..	A. M. Erskine.			
Greasbrough ..	..	..	..	5	6	..	..	..	..	..	1	..	..	1	4	1	..	..	..	3	..	..	..	E. B. Jago.			
Greetland ..	..	..	21	3	6	..	..	..	1	3	19	..	..	1	9	1	..	..	3	2	..	..	..	H. N. Ingham.			
Guiseley ..	..	..	2	5	4	..	..	..	..	..	2	..	..	1	4	2	..	..	1	..	4	..	..	W. H. Cheetham.			
Gunthwaite-w-Ing.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	D. J. Max.			
Handsworth ..	..	..	19	5	38	..	..	..	3	..	99	..	..	4	15	14	..	..	6	2							







TABLE IV.

Results of Visits by the Health Visitors in those districts where the County Council carry out the duties under the Notification of Births Act, 1907.

SANITARY DISTRICT.	No. of Births Registered.	No of Births Notified (including Still Births).	No. of First Visits.	No. of Re-Visits.	No. of Pre-Natal Visits.	No. of Special Visits (Epidemic Diarrhoea, etc.).	No. of Still-Births Notified.	No. of Deaths under one year.	Measles Cases Visited.	No of cases seen at Maternity Centres.
	2	3	4	5	6	7	8	9	10	11
I. URBAN.										
Adwick-le-Street ..	365	392	412	2018	47	89	12	24	12	4248
Altofts .. .. .	122	128	127	2072	146	28	2	11	57	—
Ardley .. .. .	238	247	197	1629	11	8	10	25	—	1242
Ardley, East and West	204	169	253	1475	38	2	3	26	11	2254
Baildon .. .. .	134	113	126	543	9	5	4	6	—	—
Barkisland .. ..	30	27	28	390	8	—	1	—	—	—
Barnoldswick .. ..	255	250	260	2140	78	95	7	23	35	—
Batley Boro' * .. .	888	—	—	—	—	—	—	74	—	—
Bentley-with-Arksey ..	444	429	402	1857	87	16	15	40	1	3822
Bingley* .. .. .	395	—	—	—	—	—	—	34	—	—
Birkenshaw .. .. .	64	62	78	516	8	2	5	5	1	—
Birstal .. .. .	169	169	172	1285	26	5	3	18	1	—
Bolton-on-Dearne* .. .	421	—	—	—	—	—	—	46	—	—
Brighouse Boro' * .. .	421	—	—	—	—	—	—	30	—	—
Burley-in-Wharfedale ..	66	63	61	400	17	—	2	6	—	—
Calverley .. .. .	58	56	43	546	6	4	2	3	2	—
Castleford * .. ..	757	—	—	—	—	—	—	96	—	—
Clayton .. .. .	85	95	81	717	29	3	6	6	—	—
Clayton West .. .. .	40	47	46	661	57	1	2	4	3	—
Cudworth .. .. .	292	295	314	1175	79	11	5	27	—	3975
Darfield .. .. .	170	166	176	2302	23	54	4	18	—	1079
Darton .. .. .	370	375	446	3160	162	38	14	38	63	3415
Denby and Cumberworth	67	76	21	243	28	—	5	5	—	—
Denholme .. .. .	58	57	51	682	32	5	1	5	—	—
Dodworth .. .. .	114	103	117	912	95	51	1	13	79	2392
Doncaster Boro' * .. .	1427	—	—	—	—	—	—	143	—	—
Drighlington .. .. .	80	93	94	570	10	—	3	6	—	—
Earby .. .. .	156	159	191	2418	25	25	6	10	9	—
Elland .. .. .	203	156	174	1598	5	13	4	25	1	—
Emley .. .. .	49	46	70	192	11	—	1	4	—	—
Farnley Tyas .. .. .	11	10	9	48	7	—	—	—	—	—
Farsley .. .. .	117	112	140	1186	6	21	2	8	—	524
Featherstone* .. .. .	490	—	—	—	—	—	—	65	—	—
Flockton .. .. .	27	35	52	518	—	17	4	1	—	—
Garforth .. .. .	86	81	72	682	51	2	—	8	192	801
Gildersome .. .. .	54	56	61	394	—	1	2	5	—	—
Golcar .. .. .	213	135	188	955	38	111	6	16	—	—
Goole* .. .. .	624	—	—	—	—	—	—	48	—	—
Greasbrough .. .. .	79	56	66	752	1	25	2	10	—	—
Greetland .. .. .	65	66	100	785	27	77	—	1	5	—
Guiseley .. .. .	117	110	112	409	19	16	2	8	—	—
Gunthwaite .. .. .	11	8	16	79	2	1	—	2	—	—
Handsworth* .. .. .	465	—	—	—	—	—	—	46	—	—
Harrogate Boro' * .. .	619	—	—	—	—	—	—	36	—	—
Haworth .. .. .	114	112	130	1165	24	—	6	11	12	962
Hebden Bridge .. .. .	112	129	135	930	27	3	4	8	4	497
Heckmondwike* .. ..	203	—	—	—	—	—	—	22	—	—
Hipperholme .. .. .	92	88	78	804	20	—	2	4	—	—
Holme .. .. .	7	1	8	42	2	—	—	—	—	—
Holmfirth .. .. .	216	226	206	1390	50	6	17	20	268	—
Honley .. .. .	76	85	79	1037	56	15	4	9	43	—
Horbury .. .. .	195	191	175	722	5	9	7	13	26	2537
Horsforth .. .. .	170	—	157	881	25	44	—	18	4	193
Hoyland Nether .. ..	456	485	511	3291	48	4	20	44	67	2209
Hoylandswaine .. ..	15	14	12	103	9	1	—	—	—	—
Hunsworth .. .. .	24	14	19	83	3	—	2	2	—	—
Ilkley* .. .. .	151	—	—	—	—	—	—	7	—	—
Keighley Boro' * .. .	800	—	—	—	—	—	—	67	—	—
Kirkburton .. .. .	78	81	145	433	27	16	3	4	23	935
Kirkheaton .. .. .	60	60	122	306	18	5	2	5	13	—
Knaresborough .. ..	123	135	101	603	73	—	11	8	—	2622
Knottingley .. .. .	232	98	193	1202	38	40	7	22	22	563
Lepton .. .. .	55	55	75	327	23	37	1	3	—	—
Linthwaite .. .. .	220	215	210	1142	26	12	16	20	1	—
Luddendenfoot .. ..	55	13	54	418	40	7	—	1	—	—
Marsden .. .. .	124	62	256	890	10	12	6	9	3	—
Meltham .. .. .	92	74	84	1163	74	7	2	5	23	—
Methley .. .. .	137	127	129	1040	25	2	3	13	3	—
Mexborough* .. .. .	472	—	—	—	—	—	—	50	—	—
Midgley .. .. .	32	18	22	113	28	6	—	7	—	—
Mirfield .. .. .	268	292	247	1038	58	191	21	21	127	—
Monk Bretton .. .. .	174	155	171	1115	11	10	7	21	—	—
Morley Boro' * .. ..	537	—	—	—	—	—	—	46	—	—
Mytholmroyd .. .. .	61	37	56	449	3	2	—	4	—	—
New Mill .. .. .	108	75	100	856	30	—	—	6	139	—
Normanton* .. .. .	449	—	—	—	—	—	—	46	—	—
Oakworth .. .. .	77	57	62	536	10	—	2	6	28	—
Ossett Boro' * .. ..	399	—	—	—	—	—	—	45	—	—
Otley .. .. .	190	188	203	1404	130	159	7	13	24	—
Oxenhope .. .. .	34	37	47	349	6	1	3	3	1	—
Penistone .. .. .	59	70	53	544	40	7	3	5	—	—
Pontefract Boro' .. .	533	541	462	2034	89	6	15	64	—	4451
Pudsey Boro' * .. ..	281	—	—	—	—	—	—	23	—	—
Queensbury .. .. .	81	92	86	1376	97	15	6	3	—	1515
Rawdon .. .. .	77	55	73	274	8	7	1	5	1	—
Rawmarsh .. .. .	578	525	559	6441	249	451	13	62	5</	

